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DOMINION MEDICAL MONTHLY

AND ONTARIO MEDICAL JOURNAL

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VOLUME XXVI.

108487
16/3/11

TORONTO:
GEORGE ELLIOTT, PUBLISHER

203 BEVERLEY STREET

1906

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Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVI.

TORONTO, JANUARY, 1906.

No. 1.

Original Articles.

THE TREATMENT OF CYSTITIS.*

HOWARD A. KELLY, M.D., BALTIMORE.

Miscere utile cum dulci, to impart useful information in an entertaining manner in general addresses of the character I am asked to deliver, seems to be a custom as old as, and closely akin to the use of excipients to carry a drug which is not pleasing if taken in its naked strength. Who does not recall with pleasure the "elegant" mixtures, the electuaries and the compound syrups of our forefathers?

I have tried to meet your expectations to-day, by bringing before this large audience, representative of the most advanced medical thought of our day, one of the oldest and most rebellious of the enemies of our race, namely, cystitis, bound in chains, and I trust that you will find no small satisfaction as you thus note that one more step has been taken in the path of therapeutic progress.

The resume I shall thus give you embraces over eighteen years of a personal experience, largely devoted to this particular subject.

In order not to raise too great expectations, let me declare at the outset that, as is often the case in that difficult art which we

*Read before Canadian Medical Association, Halifax, Aug. 22-25, 1905.

profess, I have no single drug or method to propose by which all cases can be cured. It is only by a painstaking study of all the conditions, and persistent patient efforts that cystitis can be understood and successfully combated. The therapeutic side of the subject in which your interest naturally focuses, is so large that I cannot do more than touch upon history, etiology, pathology, chemical history and diagnosis.

HISTORY.

Two great names of our fellow-countrymen stand pre-eminent in the history of the treatment of cystitis, and to them alone will I refer in this brief resume, as they are in danger of being lost sight of in the hurry which characterizes the progress of to-day. One of these is Willard Parker, of New York, who, in 1850, at the Bellevue Hospital, operated upon a case of chronic cystitis in the male, stating that, "The object in view was to open a channel by which the urine could drain off as fast as secreted, and thus afford rest to the bladder, the first essential indication in the treatment of inflammation." This was reported in the *New York Medical Journal* for July, 1851.

The other is T. A. Emmet, who, in 1858, operated for a vesical calculus, and, by the advice of Marion Sims, left an opening in the vesico-vaginal septum for the greater facility afforded in the treatment in the efforts to restore the organ to a healthy state. Subsequently to this, Emmet "made an artificial vesico-vaginal fistula, with a view of giving rest to the organ by the pre-escape of urine." (*Amer. Pract.* for Feb., 1872.) Emmet records several cases of cystitis treated by this plan in his classical work on vesico-vaginal fistula, published in 1868, while Parker also presented at the New York State Medical Society in 1867 a paper on "Cystitis and Rupture of the Bladder treated by Cystotomy."

One of Emmet's most rebellious cases, a woman who had suffered for three years, after cystotomy and irrigations of the bladder, was examined "endoscopically" by Dr. Newman, June 1st, 1869, and the bladder found free from disease, whereupon Emmet closed the fistula, and with some further slight treatments she fully recovered.

I mention these facts, as I am sure we are too prone to forget

the skilful labors of our predecessors, upon which all that we are successful in doing to-day rests as a sure foundation. All honor to these noble painstaking pioneers in this most difficult corner of our field of labor.

ETIOLOGY.

Again I turn with no little pleasure to Emmet, who, writing in 1872, says: "Neglect during labor to keep the bladder empty, exposure to cold, violence, and the habit of long retaining the urine, are the chief exciting causes of the most serious forms of cystitis." In investigating this, as in other inflammatory affections, we have to consider two factors—the predisposing causes which prepare the ground for the cystitis to which we have but little to add to what Emmet has said, and the exciting cause, the particular living organism which is the immediate agent in setting up and in maintaining the disease. It is this last important factor which has given us a new conception of the subject and served to modify and direct our treatments.

Contrary to the opinions of some ten years ago, we now know that the mere presence of organisms is not sufficient of itself to excite a cystitis. This is seen in cases of bacteriuria, where, although the urine is loaded with organisms, there is but a nominal lesi, or no lesi at all, in the bladder.

The following predisposing factors are important :

1. Localized congestion.
2. Traumatism.
3. Retention of urine.
4. Reduced health.
5. Two or more of these factors combined.

The congestion may result from "catching cold" and exposure, or from the action of toxins or chemical irritants on the bladder, excreted by the kidneys or from a hyperacidity of the urine, or again from the presence of tumors in the bladder.

Traumatisms arise from labor, especially where the forceps are used with the bladder not emptied, from the use of the catheter, and most important, from surgical operations on the uterus involving the detachment of the bladder, and from stones lodged in the bladder.

Retention of urine from faulty emptying of the bladder, as in

The great importance to be attached to this study of the etiology of cystitis is the discovery of several factors easily within our control, notably the trammato. By recognizing this fact we can often do much to prevent a cystitis in many instances.

The most important group opened up by a bacteriological study of the urine, is the tubercular cases, which, as a rule, call for more aggressive plans of treatment.

I will pass over the pathology, simply noting two important facts which bear powerfully on the treatment of cystitis.

First, that the disease is sometimes purely superficial, being seated only in the mucosa, while at other times it extends deep down even into the muscularis.

Second, the disease is often localized to a few well-defined patches; it is rarely universal.

The following clinical forms may be recognized, apart from the infecting organism or organisms:

1. Catarrhal, involving the superficial mucosa.
2. Desquamative.
3. Ulcerative.
4. Granular.
5. Papillary.
6. Bullous edema.

The divisions into acute and chronic, separate the cases according to duration and intensity of symptoms.

DIAGNOSIS.

A diagnosis of cystitis may be made when pus is found in the urine, in association with an inflamed area in the bladder; this latter may be inferred by symptoms such as pain and frequent urination, or by a direct visual examination of the interior of the bladder.

I must bear in mind that my remarks may fall into the hands of some very busy practitioners, who may find it hard to get time to use the microscope. I would, therefore, utter the caution not to mistake a pollakuria (frequent urination) for a cystitis. In my experience this has often been done, and then the active measures of treatment instituted have converted the innocent and annoying disease into a dangerous one.

Again a caution: You are likely to mistake a dysuria from

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hyperacidity of the urine for a true cystitis, unless you apply some other test than the subjective symptoms.

Yet another caution : A little affection in the vesical trigonum by the intensity of the symptoms it provokes may hide a much graver and more advanced latent affection in one of the kidneys.

The diagnosis, to be sure and satisfactory, should ascertain not only the fact that there is a cystitis, but its extent as well.

A diagnosis which begins and ends with the word "cystitis" is as accurate as the statement that the patient has thoracic disease.

Again, even though we determine the nature of the infecting organism, the diagnosis is still no more accurate than it would be to say that the patient has pulmonary tuberculosis. You see here readily enough how vital are the questions, where is the disease located? and, how extensive is it? Apply like questions to the bladder.

Let the man who is willing to go carefully into his cases rest his diagnosis on these features:

1. History, including symptomatology.
2. Examinations of the urine, microscopic and bacteriologic.
3. A direct inspection of the interior of the bladder.

I cannot urge with sufficient earnestness the ease with which the examination is made through the open cystoscopes without any intervening medium of lenses or water, nor can I sufficiently declare the importance of the results thus obtained in clearing up and giving precision to the diagnosis.

With such examinations cases of bacteriuria become much rarer, as some infection of the vesical mucosa is almost always found, even though there is a remarkable disproportion between the local disease and the numbers of the bacteria.

TREATMENT.

I am glad to address you on the subject of the treatment of cystitis, as I have now had an experience of over five hundred cases, which have been carefully collated from my records of Dr. Campbell, of this city.

I think we have gone as far as we can under existing conditions, and must await some fresh and important discovery to change our present methods materially, and when the specialist

feels that he has pretty well thrashed a subject out, it is time to hand his work over to the general practitioner to see how much he is ready and able to appropriate.

Three important factors enter into the successful treatment of cystitis:

1. A full, carefully written analysis of the case, including a description of the appearances seen in the bladder.
2. A well-defined campaign against the disease, progressive in character.
3. Great patience; never give up.

All preliminary discussions as to history, etiology and pathology lead up to the two great practical issues: how to prevent the disease and how to get rid of it.

Prophylaxis.—I am convinced that if we pay closer attention to prophylaxis there will be a prompt and a large percentage — reduction in the cases of cystitis. Most of the cases seen nowadays, follow some ordinary surgical operation.

A potent factor in the prophylaxis is the proper use of the catheter, which I may summarize as follows:

A sterilized catheter; cleansing of the internal meatus before introduction.

The general introduction of the catheter without touching the end introduced. The bladder must not be permitted to become distended.

It is also important to remember that the patient, unaccustomed to lying on her back, often empties the bladder very imperfectly. If the urine tends to separate in the bladder some warm boric acid solution should be thrown in to wash it out every time the catheter is used.

In an abdominal hysterectomies, the bladder should be rubbed, touched and bruised as little as possible. I have looked into the bladder after a hysterectomy for myomata and seen large transverse striæ of fresh hemorrhages on the posterior wall.

In another similar case, in which I reopened the abdominal wound, the bruised bladder was at first mistaken for a large, fresh blood clot.

Further, where there is reason to fear cystitis, and always when the catheter is used, it is well to use urotropin for a few days, in 5 or 10 gr. doses t. d., as a prophylactic. The consensus is that cystitis will but rarely occur if this precaution is taken.

11. *Remove the Cause.*—The sister of one of our ablest practitioners got up from her lying-in-bed with a bad cystitis which numerous treatments failed to ameliorate in the least degree.

She entered my cystoscopic room for the first time; I put her in the knee-chest posture and looked into the bladder, and lo! there was a white calculus as big as a pigeon's egg lying in the vertex. With the removal of the calculus she made a prompt recovery.

Take nothing for granted; if you can look at a sore throat, you can also, with a reflected light and a little patience necessary to acquire a little more dexterity, look into an inflamed bladder.

Make also a searching examination of every contiguous pelvic organ. If there is a myoma or an ovarian tumor or a pelvic inflammatory mass pressing on the bladder and interfering with its proper evacuation, take the tumor or the mass out.

Another patient with a bad pyuria, whose kidney was to be taken out, I found had a small septic dermoid cyst opening into the bladder by a passage; the removal of the tumor and the closure of the orifice cured the disease and saved her from a serious mutilation.

In any obstinate case, especially if it is one of lesser degree, always remember that the source of constant reinfection may reside up in the pelvis of the kidney. If you find tubercle bacilli associated with a cystitis you may be sure that in nineteen cases out of twenty the primary focus is in the kidney.

As we consider the active treatment of a cystitis, let me urge two important factors which serve as controls in testing progress towards recovery.

1. A careful preliminary examination and description of the local condition as seen through the speculum, on the interior of the bladder sphere. If there is any marked improvement examinations from time to time will show it by the variations of color, and in the extent of the lesions.

2. The taking of a measured quantity of fresh urine, say three platinum loops, and spreading this on the slant agar, and then counting the colonies which grow out, as a means of testing the reduction of the amount of infection. These individual foci will often be found to diminish progressively from countless to dis-

crete, to perhaps 100 to 15 or 20 to 2 or 3, to finally none at all. Several sterile cultures ought to be secured before the case is considered free of any risk of relapse.

Let us now consider our resources in dealing with a particular case. They are: Systematic treatment, medicines by the mouth, injections into bladder, direct topical treatments of the vesical walls, surgical treatment, including incision of the bladder, and excision of the disease.

Rest in bed is of the most importance, for this reason: I can always do far better for a case if I can get her into my hospital, with rest associate regulated diet, tonics, the due regulation of the bowels, and massage and baths.

Medicine by the Mouth.—Large quantities of bland water is a valuable remedy here as in ordinary pyelitis. The virtue, I think, in the various landed waters resides in the pure aqua potabilis which they contain, and not in the various salts shown in the analysis. Some patients will take, however, with better grace three or four pints daily of a water which is imported in a big bottle with a sounding name, than the simple but equally efficacious spring water from a home source. It is the old tale of the bread pill and the placebo.

Urotropin in 5 to 10 gr. doses is of value in the more recent cases, especially where there is a tendency to alkaline changes. (Nicolai.)

The citrate of potash is valuable where the urine is too acid, while boric acid is of use to make the urine acid.

There is some advantage in reversing the chemical reaction of the urine under which the organisms are flourishing, though not so great as one would have anticipated.

Cantharadin has been used by Freadenberg with the greatest benefit, in a series of 56 cases, curing 32 rapidly. The Px is Canth. (Merck.) 0.001 in 1.0 alcohol dissolved in 100 water. Take three or four times a day in teaspoonful doses.

I use also fluid extract of corn silk (*Zea mais*) in teaspoonful doses with advantage in the amelioration of the symptoms.

Irrigations form, perhaps, the most important means of treatment at our command, and with irrigation it is well to combine *distention* of the bladder.

The simple daily cleansing of the bladder in this way is of the

utmost value, and many cases would recover rapidly if only bland fluids were used.

The two most efficient drugs here are the nitrate of silver, 1-1500 to 1-500 or stronger, and mercurie sublimate 1-1000.

As good a plan of administration as any is to connect a rubber tube with a funnel attachment to the catheter, and then slowly elevate the funnel two or three feet above the level of the pelvis. By the amount borne and the height, one can pretty well estimate the progress of the more difficult cases towards recovery. The great quality of importance here for both patient and practitioner is patience. It sometimes takes weeks or months to secure the first decided step in advance, with many apparent backsets in the interim.

I must confess to you right here that in several of my cases which we have worked over for one or two or even more years, securing a recovery in the end, I would never have had the courage to persevere were it not for the unflagging interest and zeal of Miss Cook, my chief nurse, who has personally conducted almost all of the treatments.

Direct Topical Treatments.—When a cystitis is in the chronic stage and is furthermore localized in a small area in the bladder, one for example which could be covered by the last joint of the thumb, direct topical treatments often hasten the improvement and even effect a cure. The bladder is emptied and the patient put in the knee-chest posture, then through an open cystoscope, using a reflector or other suitable illuminant, the patch of inflammation is exposed and treated just as a chronic sore throat is handled, making a direct strong application by means of an applicator and a pledget of cotton. Nitrate of silver is best here, used over a small area as strong as 50 p.c. For larger areas 10 or 5 p.c., taking care that there is no excess of the solution to run down over the sound mucosa. I also use freely a 50 p.c. solution of argyrol. Subsequent treatments must be milder and at intervals of from three to seven days. A 1 and a 2 p.c. solution is often valuable in trigonal inflammation (trigonitis).

An admirable effective combination is formed by associating occasional topical treatments with daily injections and distensions.

Surgical Treatment of Cystitis.—It is in the surgical treatment of cystitis that the greatest difference is found between our

practice and that of our immediate predecessors of even a decade ago. And it is here that I have some fresh additions to make, bringing some utterly rebellious cases entirely within the scope of successful treatment.

There are two kinds of surgery, minor and major.

Minor cystic surgery consists in the use of a sharp or serrated curette, or a wire brush, or of a bunch of fine wire needles. I expected great help from these instruments when I began to use them, but must confess to disappointment in the issue. The tissue removed is of value in differentiating a tubercular bladder, but I cannot see that the treatment is hastened, while harm may be done, as Sampson has shown if the ureteral orifices are injured, favoring an ascending infection.

Major Surgery.—When I receive a case of intense vesical inflammation, where all local treatments, even the mildest, are impossible on account of the pain produced, I, without loss of time, resort to major surgery, and propose at the outset to put the bladder at rest by making the Parker-Emmet incision in order to secure good continuous drainage. I do this in a few seconds, often by putting the patient in the knee-chest posture and letting air into the bladder through the urethra. Then lifting up the perineum the anterior vaginal wall is exposed and lifted a little on a pair of curved artery forceps slightly opened. A knife is plunged through the septum at this point and the opening enlarged fore and aft until it is at least an inch long. I wipe out the bladder thoroughly with dry gauze and sew the vesical mucosa to the vaginal at about six points to prevent too rapid closure of the wound. All this takes about the same time to do it that it does to describe the operation.

Such an opening ought to be left, as a rule, for from three to six months. The bladder and vagina should be irrigated every day either *per urethrum*, if not too sensitive, or *per vaginam*. A continuous daily hot water bath as recommended by Hunner, leaving the patient immersed for hours, is a most valuable adjuvant in the worst cases. In due time the bladder will be found to have cleared up, perhaps wholly, when the fistula is closed and the patient discharged. On the other hand, many cases clear up only to a certain point, and go no further, and of these I wish to speak somewhat particularly, for this is that large residual

group of our worst cases of cystitis, generally looked upon as hopeless.

Let me briefly outline the treatment of such a case. In the first place, given one of these intensely inflamed old cases of cystitis in a patient worn out with vigils and suffering, mild courses of treatment are worse than useless, serving only to increase the distress. To avoid discouragement, tell the patient, who has suffered for years, that she must be content to give a few months, or, perhaps, a year or more to getting well. Then begin by opening and draining the bladder, then when you find the organ cleared up to one spot you may try for a few weeks to heal that by direct applications of nitrate of silver or argyrol, and in this you may succeed. If you fail and there is a tendency to relapse, make a suprapubic opening and cut out a crescentic piece, including the entire thickness of the bladder wall, and sew it up with catgut suture on the inside and fine silk on the outer surface.

If you have to open the peritoneal cavity, and the bladder is a foul one, you can sequestrate the entire vesical region by suturing the round ligaments and the uterus to the abdominal wall from side to side, converting the peritoneal cavity behind the symphysis into a closed pouch, which is then drained over the symphysis. In a bad case which I treated in this way and had to open later for an ovarian trouble, there was no trace of the pouch left.

I have not found great help from the making of a small suprapubic opening in association with a vaginal opening for through and through drainage. If, however, worst comes to worst, I would make a big suprapubic opening, partially detach the recti, and put the patient in the hot tub for as many hours daily as she could stand.

1. Mrs. R., aged 55, came to me in October, 1899, with a chronic cystitis, which had persisted for fourteen years in spite of being several times "cured." I found the entire vesical mucosa covered with scattered foci of ulceration pouring out a curdy pus. The urine was alkaline, containing a short organism, probably colon.

She received under my care the following treatments: A borax and soda solution by irrigations, applications of the nitrate of silver (2—4 p.c.), insufflations of boric acid powder against the diseased vesical wall, formalin irrigations (1—15,000 to 1—2000), irrigations of silver nitrate from 1 to $\frac{1}{2}$ p.c. strength.

Under these treatments there was a steady improvement, the organisms decreased, and the capacity of the bladder increased from 60 to 280 cc. She was cured in 41 days and has remained well ever since. I tested the efficiency of the treatment by making cultures on several successive occasions and noting that there was no growth. So since this cure there has been no relapse.

Let me illustrate the group of difficult cases by giving you a brief outline history of seven of my patients. In two the disease was tuberculosis, in the others the organism was a colon bacillus.

2. Miss J. MacD., 33 years of age, came to me in 1899 suffering from frequent urinations with a slight pyuria and hematuria.

Examination showed an area of intense cystitis at the vesical vertex, and as she had suffered for four years I proceeded at once to surgery and opened the abdomen and excised an ulcerated area of the bladder at the vertex, $3 \times 2\frac{1}{2} \times 1\frac{1}{2}$ cm. in size. This was closed without drainage, using sixteen catgut sutures in the first and ten in the second layer. She recovered at once and has been in the best of health ever since.

The pathological examination of the greatly hypertrophied bladder wall showed granulation tissue and inflammatory infiltration.

3. Miss J. R., aged 29, came to me in March, 1900. She had been suffering with her bladder for five years. It is probable that the frightful cystitis from which she suffered was induced by catheterizaaiion in a hyperacid bladder in a nervous woman.

She was in a wretched mental state from the suffering night and day, emptying her bladder every few minutes.

The urine was full of pus and contained blood; cultures showed that the infectious organism was the colon bacillus.

Cystoscopically, the bladder was of an intense angry red color, with extensive areas of ulceration; there was not even a small area of sound tissue seen at any point. She simply screamed whenever she was touched.

She was about three years under treatment, and her recovery is largely due to the untiring efforts of my chief nurse.

The following treatments were used:

1. Curettage and the use of the wire brush over the whole inner surface of the bladder, followed by a 10 p.c. solution of silver nitrate.

2. Fourteen days later another curettage

3. Ten days later I was able to catheterize the left kidney and demonstrate a left pyonephrosis, which was opened and drained. At the same time a suprapubic cystotomy was done to facilitate irrigating the sensitive bladder.

I left a mushroom catheter in the kidney wound and a ureteral catheter in the ureter to facilitate washing out the kidney.

4. Dilatation of the renal and suprapubic openings.

5. Left nephrectomy (intracapsular enucleation) by mercellation. Closure of the suprapubic opening.

6. Plastic operation narrowing the urethra, which had been overstretched before she came to me.

7. Plastic operation repeated.

The bladder was so small when I began to treat her that she could not hold as much as 10 c.c. of fluid, and even under extreme anesthesia she strained and forced the fluid out if more was thrown in.

During all the time of the above treatments she received at Miss Cook's hands 135 irrigations of either boric acid or nitrate of silver with boric acid.

Under this regimen the bladder recovered its capacity and normal appearance. To-day she is in perfect health and suffers no pain. The only remaining discomfort is that she urinates often, and this I have been unable to overcome, although I can now put 400 c.c. into her bladder.

4. Miss C. P., aged 52, came to me in October, 1902. I saw her first in bed, a lifeless invalid, suffering intense pain, with spasmodic exacerbations day and night. I never saw a sadder picture. She lay in a constant state of apprehension of pain and screamed when the vagina was touched even for the purpose of making the gentlest examination. The entire bladder was the seat of intense inflammation and ulcerations from the vertex to the left ureter. Its capacity was two-thirds of an ounce (20 c.c.).

She has made a perfect recovery and has remained well under the following treatments:—

1. October, 1902, vesico-vaginal fistula for drainage.

2. November, 1902, suprapubic fistula to wash through and through; enlargement of vesico-gavinal fistula. Plastic operation, opening the vulvar orifice, which acted like a sphincter to retain the foul urine in the vagina and bladder.

3. January, 1903, dilatation of suprapubic fistula with Hegar's dilators and introduction of a self-retaining catheter.

4. February, 1903, left nephroureterectomy, removing a tubercular kidney and ureter.

5. April, 1903, closure of the vesico-vaginal fistula.

Irrigations of a half saturated solution of boric acid were given from one to six hours daily, amounting in all to 1,000 hours of treatment.

The result has been an absolute recovery, and she is now stout, robust, and able to attend to all her household duties in town and country.

6. Miss L. M., aged 24, came to me in January, 1900. She had had a vesico-vaginal fistula made to drain an intensely inflamed bladder three years before.

After trying various palliative measures, I opened the bladder above the pubis and trimmed off numerous granulations from the posterior vesical wall and then drained the bladder with iodoform gauze.

In November, 1902, I excised the entire diseased area, including all the bladder wall, removing a triangular area from the vertex to the base of the bladder 1 cm. in thickness, and closing the opening with interrupted catgut sutures tied within the bladder. This is the case in which the whole bladder area was excluded from the peritoneal cavity by sewing the round ligaments and fundus of the uterus to the anterior abdominal wall. (See Johns Hopk. Bul., 1903, p. 96.)

All of the disease was not removed at this time and I had subsequently, on account of repeated hemorrhages, to open the bladder again (November, 1903), and excise three pieces, one in front, one at the vertex and one at the posterior wall.

The wounds were again closed with interrupted catgut sutures tied on the inside of the bladder. It was wonderful to see how little traces were left of the sequestration operation; there were only a few adhesions between the bladder and tubes and ovaries.

Remarkable features in this case were, first, the fact that giant cells were found in the tissues excised when we had been utterly unable to discover any bacilli in the urine or curettages, examined repeatedly over periods of months' duration.

Second, that the disease was primary as far as the primary organs were concerned; in the bladder, there was no renal disease.

7. Mrs. H. M., aged 34, came to me in May, 1901. She was an utter wreck from nine years of suffering, extremely emaciated, and abandoned to die of an advanced tuberculosis of both kidneys and bladder. The bladder was ulcerated from vertex to urethral orifice and there was not a sound spot to be seen.

I began, May 4th, by draining the bladder by the vagina and giving rest from the constant suffering.

May 18th, a left nephrotomy was done.

June 15th, left nephrectomy and a ureterectomy as far as the pelvic brim.

October 14th, closure of the vesico-vaginal fistula.

October 22nd, 1902, extirpation of the lower end of the ureter.

February 24th, 1903, suprapubic resection of the bladder, taking away about one-half of the bladder, including the left ureteral orifice.

April 9th, 1903, closure of the vesico-vaginal fistula.

With these surgical measures were associated irrigation and distention treatments, as well as typical treatments with silver nitrate.

From holding nothing at all, the bladder has increased to normal capacity in spite of the extensive resection done; in October, 1903, it held 225 c.c.

She is now practically a well woman, stout, hearty and attending to all manner of household and social duties.

I trust, in conclusion, gentlemen, that I have demonstrated that, granted the important elements, skill and patience, practically all cases of cystitis, even the worst, can be cured.

The first step is to make a correct diagnosis, so as not to treat as a cystitis a case of irritable bladder.

The next step is to determine the grade of the disease and the character of the infection, and, most important, to differentiate tuberculosis.

Again, the kidney must be borne in mind as a possible source of reinfection in cases very slow to clear up.

After a thorough study of the field begins an aggressive campaign on the lines indicated, well defined and progressive until the patient is cured

CHRISTIAN SCIENTISTS AND THE LAW.

BY WALTER MILLS, RIDGETOWN.

In dealing with the Christian Scientist as a doctor or healer, it is not necessary to indulge in any criticism of the theories relating to his religious ideas, although his theory of disease is among the ideas he regards as religious. It is only, that in my opinion the tendency of his tenets and teaching in this regard so strongly tend to such a perversion of the human mind by training it to a hardened indifference to the value of human life, that I venture to point out its mischievous and homicidal trend.

Under sections 209 and 218 to 226, inclusive, of the Criminal Code of Canada, it is quite clear that where death results to one under the custody of the Christian Scientists or of any one else when death might have been prevented by a performance of the duty imposed by law to provide the necessities of life, one of which is medical aid, it would seem that there would be a proper case upon which to rest the charge of homicide. While under section 223 of the Code, mere mental influence to prevent the patient seeking or soliciting medical aid or treatment, might seem to relieve the custodians of the sick from responsibility, there would seem no possibility of escape under the provisions of section 209, which makes the duty to provide such aid imperative, and under 220 their culpability in omitting to do so is absolute, and in 225, the nature of their offence clearly characterized. Conscientious scruples cannot make the offence less grave. Even if it could devoid the omission of the motive of intent to kill, it could only reduce the crime to manslaughter. The Code says any one who is guilty of an omission which causes the death of a person, kills that person. There is no exception in favor of persons conscientiously abhorring the services of a medical man. It is imperative to provide medical aid, and to treat the law with contempt, puts the plea of want of intent out of court and leaves no alternative but to hold the Christian Scientist or

any one else responsible for such neglect as leads to a fatal conclusion of the victim's life, guilty of homicide.

The Ontario Medical Act provides for the registration of physicians, and its object is to regulate the practice of medicine and surgery in the province of Ontario, and indirectly, with the aid of The Public Health Act, to "secure the safety and protect the health of the public," and it might be well to consider the scope of those of its provisions which have been challenged by this new school of healing which is dethroning the intelligence of the common people, and challenging the ascertained facts of true science and defying the well settled principles of medical jurisprudence. Section 49, Ch. 176, R.S.O. 1897, provides,—“It shall not be lawful for any person not registered to practise medicine, surgery or midwifery for hire, gain, or hope of reward; and if any person not registered pursuant to this Act for hire, gain or hope of reward, practises or professes to practise medicine, surgery or midwifery, he shall upon a summary conviction thereof before any Justice of the Peace, for every such offence pay a penalty not exceeding \$100, nor less than \$25.”

In *Regina v. Stewart*, 17 O.R., 4 C.P.D., page 4, the defendant attended a couple of sick persons for which he received payment, but he neither prescribed nor administered any medicine nor gave any advice, his treatment consisting of merely sitting still and fixing his eyes on the patient. Held, that this was not a practising of medicine, contrary to the provisions of the above section 45, C. 148, R.S.O., 1887, (now see 49 of the Medical Act, 1897) and a conviction therefor was consequently quashed. The Christian Scientists assert that they do not practise medicine, and so claim that the law governing such practice has no application to them. Mrs. Eddy says, “A Christian Scientist never gives medicine, never recommends hygiene, never manipulates, . . . nor requires the life history of his patient.” Section 50 of the Ontario Medical Act says, “Any person who wilfully or falsely pretends to be a physician, doctor of medicine, surgeon or general practitioner, or assumes any title, addition or description other than he actually possesses and is legally en-

titled to, shall be liable on conviction thereof before a Justice of the Peace, to a penalty not exceeding \$50, nor less than \$10."

Now, as the practice of the Christian Science healers does not necessarily involve the practice of medicine, surgery or midwifery, in that they do not report the use of drugs, instruments or manipulations, under the above section, I shall try to demonstrate that they do undertake by profession to usurp the prerogative of the medical man. The Christian Scientist when in court claims that he does not administer medicine, nor does he profess to know the properties of medicine or their therapeutics. He simply ignores them as having any virtues and regards them as agencies of evil and error, that their properties are only attributed and their effects produced by mind; thought gives them potency. He believes that through the power of prayer, as he engages in it, disease can be reduced to a minimum, that disease is an error of belief and through prayer and reading selections from Mrs. Eddy's "Science and Health," the Scientist endeavors to induce in the patient's mind an abstract conception apprehending a condition of health adequate to eradicate the consciousness of the symptoms of disease, to give an absolute mental denial to the facts sufficiently potent to overwhelm them. One recognizes in this the basis of all Mental Cure, subjective mind suggestion, but imperfectly understood. And so upon such a plea he evades successful prosecution under such section which may not be as comprehensive as it should be. The Act contemplated and was designed in this respect to put a veto upon quacks or unskilled practitioners, persons practising as physicians would practise, but without the qualifications required by the law for the safety of the public. It defines who are physicians and regulates the terms and methods of practising their profession, and persons not so qualified are excluded from registration, and non-registered persons or persons not so entitled to be registered if practising would be doing so unlawfully and subject to the penalties prescribed.

In the first place consider the theory which they hold concerning disease. Mrs. Eddy's hypothesis is that "the only realities are the divine mind and its ideas . . . that erring mortal views, misnamed mind, produce all the organic and animal action

of the mortal body . . . rightly understood, instead of possessing sentient matter, we have sensationless bodies . . . whence came to me this conviction in antagonism to the testimony of the human senses? From the self-evident fact that matter has no sensation; from the common human experience of the falsity of all material things; from the obvious fact that mortal mind is what suffers, feels, sees; since matter cannot suffer." And upon this she attempts to build her argument to substantiate her hypothesis and concludes that an understanding of these great facts obliterates the sense of complaint. Bishop Berkeley endeavored to set up a philosophical idealism which denied the reality of matter. Of him Lord Byron wrote:

"When Bishop Berkeley said there is no matter
It was no matter what he said."

Eddyism is something of Berkeleyism gone insane. One of Mrs. Eddy's former students, Dr. Arens, has published a volume called "Old Theology in its application to the healing of the sick," in which he argues that life is the cause of all action and concludes by reasoning thus: "If life is the cause of all action it must be the cause of sickness . . . thought is the first product of life, and as the thought is so will the action be. Life cannot act contrary to the thoughts which are become beliefs or opinions, that is, which have taken root or are become attached to it, unless it acts unconsciously." Dr. Marston, in a book of a similar school, states that "the mental healer does not care by what medical name the distress is known; it may be nervousness, dyspepsia, asthma, fever,—words alike to him, since the effects they denote are simply reflections or registers of wrong thinking," and he says, "the senses say matter can suffer pain; matter is insensible; the senses declare a man sick, but the real man knows nothing of disease." He finally describes the cure thus: "A mental cure is the discovery made by a sick person that he is well."

W. F. Evans, a voluminous writer, formerly an Evangelical minister, then a Swedenborgian, and lately a mental healer, remarks: "The process is essentially a spiritual work; it is held

that there is a part of us that is never sick, and this part is mentally worked up so as to control the sick person's consciousness, this destroys the sickness, for mind cures matter." One is reminded here of the incident related by D'Aubigné of Erasmus. "One day when he was in England, in the course of a lively dispute with Thomas More, on transubstantiation, More observed: 'Believe that you have the body of Christ, and you really have it.' Erasmus made no reply, but soon afterwards left the banks of the Thames, and More lent him his horse to convey him to the sea-coast. Erasmus took the horse with him to the continent, and when More heard of it he sent him a vigorous rebuke. Erasmus in reply sent him four lines of rhyme, telling him to believe he had the bodily presence of the horse, and he would really have it." One can readily see from the foregoing how little value the Christian Scientist or mental healer attaches to the skill of a physician and with what want of seriousness they would regard the condition of a person suffering from disease.

I will now quote more fully from Mrs. Eddy herself as contained in that remarkable book of more than 600 pages called "Science and Health." This book is believed by Christian Scientists to be the only true and authoritative exposition of the science of Metaphysical Healing, and that she believes herself to be infallible in this and every other respect, is shown by the following quotation. "No human pen or tongue taught me the science contained in this book, 'Science and Health,' and neither tongue nor pen can ever overthrow it." This is an assertion of infallibility that certainly demonstrates that there is considerable nerve in her intelligence if the inverse be not so apparent. "Nothing," she tells us, "that man can say or believe regarding matter is true, except that matter is unreal, and therefore a belief." Mrs. Eddy denies the potency of drugs: "Christian Science divests material drugs of their imaginary power . . . The uselessness of drugs, the emptiness of knowledge, the nothingness of matter and its imaginary laws, are apparent as we rise from the rubbish of belief to the acquisition and demonstration of spiritual understanding . . . When the sick recover by the use of drugs, it is the law of a general belief, culminating

in individual faith that heals, and according to this faith will the effect be." According to this premise it follows that whiskey may become nourishing and milk intoxicating, then may water surely be turned into wine and the rattlesnake be a fit bedfellow and plaything for children. She says: "My publications alone heal more sickness than an unconscientious student can begin to teach. If patients seem the worse for reading my book, this change may either arise from the frightened mind of the physician, or mark the crisis of the disease. Perseverance in its perusal would heal them completely." And here are four of her astounding and incoherent propositions: "1. God is All. 2. God is Good. God is mind. 3. God, Spirit, being all nothing is matter. 4. Life, God, omnipotent Good, deny death, evil, sin, disease—disease, sin, evil, death, deny Good, omnipotent God, Life." "The metaphysics of Christian Science," she continues, "like the rules of mathematics, prove the truth by inversion. For example: there is no pain in truth, no truth in pain; no matter in mind, no mind in matter; no nerves in intelligence and no intelligence in nerves; no matter in life, and no life in matter; no matter in good, and no good in matter." This reads like some gypsy incantation to cure warts. It has all the astuteness of the philosophy of the duchess in "Alice in Wonderland:" "Never imagine yourself not to be otherwise than what it might appear to others that what you were or might have been was not otherwise than what you had been would have appeared to them to be otherwise."

If Christian Scientists do not wilfully or falsely pretend to be physicians, why is Mrs. Eddy so specific in her instructions to the healer preparing to treat patients, as in the following, "Be firm in your understanding that mind governs the body. Have no foolish fears that matter governs, and can ache, swell and be inflamed from a law of its own; when it is self-evident that matter can have no pain or inflammation . . . If you believe in inflamed or weak nerves, you are liable to an attack from that source. You will call it neuralgia, but I call it illusion . . . When treating the sick, first make your mental plea in behalf of harmony . . . then realize the absence of disease . . .

Use such powerful eloquence as a Congressman would employ to defeat the passage of an inhuman law." And the following, "Suppose the patient should appear to grow worse. This I term chemicalization. It is the upheaval produced when immortal truth is destroying erroneous and mortal belief. Chemicalization brings sin and sickness to the surface, as in a fermenting fluid, allowing impurities to pass away. Patients unfamiliar with the cause of this commotion, and ignorant that it is a favorable omen, may be alarmed. If such is the case, explain to them the law of this action." Subtle mental practices are recommended: "I will here state a phenomenon which I have observed. If you call mentally and silently the disease by name as you argue against it, as a general rule the body will respond more quickly; just as a person replies more readily when his name is spoken; but this is because you are not perfectly attuned to Divine Science, and need the arguments of truth for reminders. To let Spirit bear witness without words is the more scientific way." This is further modified: "You may call the disease by name when you address it mentally; but by naming it audibly, you are liable to impress it upon the mind. The Silence of Science is eloquent and powerful to unclasp the hand of disease and reduce it to nothingness." Mrs. Eddy asserts: "There is no pain in truth and no truth in pain." In this connection Henry Varley in his "Christian Science Examined," tritely asks "Is there no truth in pain? What! have all the afflicted and suffering people of the earth been cheating us? Have the testimonies given of excruciating pain and agony being felt been false? Has the sick chamber been the birthplace of lies?" To which Mrs. Eddy in substance answers, "Pain is feeling and to the Christian Scientist the sense of feeling does not exist. Feeling belongs to matter and cannot exist where all is mind." To which irrational rejoinder, Mr. Varley replies, "Feeling belongs to the mind. Feeling the sense of physical pain as distinguished from the mind belongs to the body, that is, to matter; to the material. To say that 'there is no mind in matter and no matter in mind,' is to deny the existence of the connection and community of condition which does exist between mind and matter." Once

more Mrs. Eddy affirms, "There are no nerves in intelligence, and no intelligence in nerves." Mr. Varley answers that "science teaches that the nerve centres are all connected with the brain. The brain being the seat of the intelligence, communicates through the nerves to all parts of the body; the nerves on their side maintaining connection with and sending messages to the brain." Mrs. Eddy denies the existence of matter and rejects physical phenomena. What the physician calls the symptoms of the disease she pretends to ignore, and yet in the face of all these premises, asks that the basis of the Christian Science platform should be rested upon and accepted because of certain physical results which may be seen at their meetings and in the experience of some of their members. She says, "the five senses are the physical avenues and instruments of human error." "That what is termed disease does not exist," and yet she writes, "Christian Science changes the secretions, expels humors, dissolves tumors, relaxes rigid muscles, and restores diseased bones to soundness."

Will the Christian Scientists in the face of these statements claim that when they visit the sick chamber, they are not there to treat the patient, and so to take the place of the physician? Are they not assuming a title by deception which they do not actually possess and to which they are not legally entitled? As to the efficacy of Christian Science healing methods I here relate an instance where the application of tactful suggestive therapeutics was recommended. A farmer lad residing near Ridgetown, who when about twelve years of age, fell from a tree and sustained a severe shock to his nervous system by an injury to his spine. His friends said that he was not amenable to medical treatment. His uncle, a physician from Iowa, while visiting at the lad's home, called me in one day for a chat, and we discussed his case. I asked him if he had examined the boy to discover the presence of any disease of the spine or spinal marrow. He had not, but would do so the next day. I saw him a few days after, when the doctor told me he could discover nothing to indicate disease. The boy had to be waited upon hand and foot; he had to be fed like an infant, and was wheeled about in an invalid's chair. An

aunt from Kansas City was visiting there also, and she having learned the scientific view of his case, proceeded by such subtle means as she could contrive, to get him to do something. First by persuading him when she was alone with him to get her a drink of water; and telling him she thought he looked better and appeared to be getting strong, and at all times behaving cheerfully toward him. One day, after she had on several occasions succeeded in getting him to perform errands, invariably being met with a protest at first that he couldn't do the thing requested of him, she got him to post a letter for her, to do which he had to walk a distance of about forty rods. Everyone was astonished to see him walk into the village post office, for he had been an apparently helpless invalid for about four years. His aunt was now confident that what his physician uncle had said was true; the boy was suffering from an imaginary disability, one easily acquired from the nature of his injury, and she made bold to ask him to go to the well and fetch her a pail of water. He said he couldn't, it would break his back, but she said, "No, it won't. You can do it all right. You bring me the water like a good boy." And he did, and broke the back of the demon which had possessed him for four years, a diseased imagination, which the pity and over-indulgent sympathy of his good mother and sisters helped to aggravate. The boy went back to Kansas with his aunt and subsequently to California, where he now holds a position of employment by which he earns good wages. This is one of the class of cases the Christian Scientist, Mental Healer, and Hypnotist can generally cure. Most physicians recognize the value of suggestive therapeutics as an aid in practice, and succeed with treatment not designed to attack the disease which the patient thinks he has, but calculated to divert his mind from it. Aesculapius advised cheerfulness as a cure for sickness, and every intelligent disciple of any modern school of medicine, gives countenance to his prescription.

In September, 1903, at B

on the

Railway, one of the company's trains backed into the passenger coach of another train in which were a number of students, some of whom were injured. Among the number, a

young lady of nervous temperament suffered from the shock, and was met at the next station and carried from the train to the cab which her friends had provided, while the horror-stricken crowd gazed on as at one whose life hung by a thread. She kept to her bed for several weeks, and for a time, during the day, lay on a couch or sat in a cushioned chair. Her physician could find no local injury of any sort. Meanwhile her father was demanding from the railway company a settlement and declaring his daughter would never be well again, the opinion of several physicians to the contrary notwithstanding. She affected an air of great languor and endeavored to appear ill, and was very sensitive against any insinuation that she looked well. In time a settlement was effected whereby she was paid \$500, and soon after she resumed her duties as a clerk, and the cheerful manner and behaviour which had characterized her before the shock returned without affectation. I doubt if even the Christian Scientist could have treated her case successfully without the five hundred. Could we confine the Christian Scientist and Mental Healer to the treatment of such cases there would be less need to fear disastrous results, but real disease should be left to the hands of the skilful and the sane. "They that are whole need not a physician but they that are sick."

As to the practice of surgery, there will be no injustice to Christian Scientists to quote Mrs. Eddy again. "Man is indestructible and eternal. Sometime it will be learned that mind constructs the body, and with its own materials. Hence no breakage or dislocation can really occur. You say that accidents, injuries, and disease kill man; but this is not true. The life of man is mind. The material body manifests only what mortal mind admits, whether it be a broken bone, disease or sin." In what astounding contrast is all her positive assertion with the following modification: "Until the advancing age admits the efficacy and supremacy of mind, it is better to leave the adjustment of broken bones and dislocations to the fingers of a surgeon, while you confine yourself to mental reconstruction, and the prevention of inflammation or protracted confinement. Christian Science is always the most skilful surgeon, but surgery is the

branch of its healing which will be last demonstrated." I knew a devout Christian Scientist who had two of his ribs broken and endured three hours of intense pain pending the arrival of the physician by night rather than allow him to be seen by the neighbors approaching the house by daylight. Anne Harwood (in an "Exposure of Christian Science") has this to say: "There is one matter connected with their medical practice to which attention should be called. Christian Science practitioners actually dare to undertake the conduct of maternity cases, and Mrs. Eddy gives instances in her text-book in which she has called in a regular practitioner and has, while ostensibly obeying his directions, most daringly and recklessly disregarded them the moment he has left the house. She recommends healers and students to understand Christian Science practice in this respect, and even says it is a necessary branch of their study. If no fatalities have hitherto resulted from such practice, the reason can only be, that the public is too wise to trust these incompetent, unauthorized and uncertificated persons. This is a department of Christian Science about which very little is known, but one cannot open the books or journals of the sect without finding references to the 'Christian Science Infants,' who are declared to be specially fine children."

In Nebraska, the practice of medicine, surgery and obstetrics, is prohibited except by persons possessing certain qualifications. And in the act of that state governing the lawful practice of medicine there is a section which in part provides that "any person shall be regarded as practising medicine within the meaning of the Act, who shall operate on, profess to heal, or prescribe for or otherwise treat, any physical or mental ailment of another." In *State v. Buswell*, 40 Neb. 158, it was decided that while Christian Science is not a practice of medicine and surgery as those terms usually and generally are understood, yet that under the section above quoted, the practice of Christian Science being a treatment for physical or mental ailments, is a violation of the law. The Christian Scientist attempts to heal the sick, to cure diseases, by subtle mental process, by endeavoring to persuade the sick, diseased or injured patient, to think he is not sick, diseased

or injured, and presumes that when the patient comes to an understanding that his mind is in error, there will be no longer any reason to complain, that his alleged ailment will have vanished from his body by mental subjugation, and by the absence of the use of drugs, surgical instruments and manipulations, they evade the charge of practising medicine, surgery or midwifery. From the legal and logical aspect this is an enormous fraud, and should be met by comprehensive and suitable provision in the law so as to render the question from the medico-legal standpoint no longer debatable in our courts of justice, and from the social standpoint, to restrain in the community the operations of a cult that threatens to undermine common sense, and jeopardize the health of the public.

There have been numerous prosecutions both here and in the United States for violation of the provisions of the Medical Acts governing the practice of medicine and the treatment of disease, and the failure to secure convictions has been due to the dishonest technical evasions of the accused. Christian Science literature is full of arrogant boastings of their success in defeating the attempts to convict under such acts. The Christian Scientist in court claims that he does not diagnose, treat or prescribe. He ignores the existence of disease, and rejects its symptoms, consequently he does not have to treat it in the medical sense. He asks the patient to assume a perfectly passive state of mind and to accept suggestions of health; to quietly accept a gigantic unbelief in the reality of his complaint by denouncing the evidence of his senses. He declares by the mortal mind that that is not true which the same mortal mind declares to be a fact. He says a fact is not true and asserts that which is a lie to be a fact. Could a lunatic be more illogical? That success follows their efforts in many instances is not denied, but such may be rationally accounted for without the aid of Christian Science. But the numerous fatalities reported from time to time in the press, and authenticated as resulting from the foolhardy persistence of these presumptuous self-styled scientists and their proselytes to "eradicate error from the mortal minds" of their victims, is arousing considerable concern amongst thinking men everywhere

and inviting critical comment and investigation. And we must look to the written teachings of Christian Science to know what the true claims of these Scientists are in respect of so momentous a matter as the physical wellbeing of citizens of the state. There is sometimes such a toleration of the most absurd theories when clothed with a religious name as in this enlightened age of the world would seem to forebode an epidemic of delusional insanity, and one is constrained to feel the necessity for education leading to the compulsory duty of right thinking, and of legislation to prevent criminal rebellion against common sense. The doctrine that a man should be free to think as he chooses has its limitations. As a man thinketh in his heart so is he, and so he may ostentatiously become, as thoughts long indulged and nourished in the imagination will reveal themselves in the life and action, and a man will become reprobate or criminal through wrong thinking. But would we tolerate his performance injuriously affecting society on the plea that his habit of thought had rendered him conscientious in wrong doing? Would he himself expect to escape except by indulgence of the authorities, the consequences of his actions? Perhaps he cannot prevent the onward leap of his thoughts into channels into which they have been directed by his contact with the doctrines of Eddyism. Their novelty may have appealed to his peculiar brain activity, and his mental organization may be such that he feels compelled to achieve something for humanity through his new zeal and faith. He should not be persecuted from a spirit of intolerance of his religious motives. They may be good for him. He is thinking of something which has a forceful effect in stimulating him to investigate a matter wherein he may find some atoms of good. A religion which makes a man better than he would be without it is a good thing for him to have. And I would not want to rob him of the comfort and consolation which it may afford his nature. The peculiar creed a man follows or adheres to, may belong to his hereditary organization. Many who differ from him may deem him irrational or insane; it is his privilege to seem either or both. Perhaps no more so, than to differ as to the worldly work or calling he may choose to follow. It may belong

to his physical and mental constitution and then he follows it from inclination or adaptability. It is no invasion of the legal rights of the Scientist however, to deny him the liberty of experimenting at random upon others, with his theories which have not yet been reduced to a positive science of healing recognized by true scientists. Let the Scientist think as he chooses, his opinions may be diverse from reason and common sense, they may be unchristian and unscientific, but he must sustain his relations to society as other men and bear the consequences of his actions when he contravenes the law. Whether he should be treated with the compassion due to the insane or with the avenging justice that is the portion of the criminal being dependent upon the degree of culpability established by the circumstances and the evidence. The patients he undertakes to treat have their personal rights under the law; the protection of their health and the preservation of their lives. He is welcome to believe that disease is only an error of mortal mind that will disappear when the patient has reached a proper understanding of the so-called divine mind, but he should not be allowed to kill his fellows even from religious motives, even if the victims share his faith and are compliant. Let him exercise all the unbelief in the reality of matter he sees fit and apply his divine therapeutics to himself without stint. But when a child's life is being poisoned away by diphtheria; when a man's vitality is being exhausted by a burning fever; or when a woman, the fond mother of little children and the life light of her home, writhing in the pains of peritonitis, is passing away, while with stony indifference the mocking Scientist healer babbles set phrases from Mrs. Mary Mason Baker Glover Patterson Eddy's "Science and Health," there is some one who, when death might have been prevented, should be called upon to explain why it was omitted to call in a physician, the scientist known to the law; there is some one who stood by the bedside of the helpless ones and heard all this mockery and cant, who is guilty of murder, homicide by omission. As the Rev. Dr. J. M. Buckley says, the verdict of mankind, excepting minds prone to vagaries on the borderland of insanity, will be that pronounced by Ecclesiasticus more than two

thousand years ago: "The Lord hath created medicines out of the earth; and he that is wise will not abhor them. My son, in thy sickness be not negligent; but pray unto the Lord, and He will make thee whole. Leave off from sin, and order thy hands aright, and cleanse thy heart from all wickedness. Then give place to the physician, for the Lord hath created him; let him not go from thee, for thou hast need of him. There is a time when in their hands there is good success: For they shall also pray unto the Lord that He would prosper that which they give for ease and to prolong life."

Clinical Department.

A Case of Successful Removal of a Large Papilloma of the Rectum. J. P. LOCKHART MUMMERY, B.C. (CANTAB.), F.R.C.S. (ENG.), Honorary Surgeon to King Edward VII. Hospital for Officers of the Navy and the Army; Assistant Surgeon to St. Mark's Hospital for Fistula, in *The Lancet*.

The following case was recently under my care at St. Mark's Hospital. I have thought it worth recording, as papillomata of the rectum are uncommon.

The patient, who was a man, aged 63 years, gave the following history. He was quite well until about May, 1903, when he had a bad attack of diarrhoea lasting about six weeks. He passed six or seven motions a day; they were accompanied by a certain amount of tenesmus and pain in the upper sacral region, but at this time he had not noticed any blood with the stools. He improved under medicinal treatment and was apparently well for three months, when he had another attack of diarrhoea lasting about a fortnight and accompanied by the same symptoms as before. Since that time he has had two further attacks of diarrhoea and has noticed a little blood with and after the stools. On admission to St. Mark's Hospital he complained of frequency of defæcation (from four to six motions per diem) accompanied by tenesmus and a feeling that the bowel was incompletely emptied. There had been slight bleeding on several occasions; there was also a certain amount of rectal discharge. He had lost flesh slightly. There was a little dull pain in the upper sacral region but this usually disappeared when he lay down. On passing the finger into the bowel a soft papillomatous mass was felt in the posterior rectal wall about four inches from the anus. The growth was of about the size of a five-shilling piece, somewhat tender, and it bled slightly after examination. With the electric sigmoidoscope the growth could be easily seen above the middle Houston's valve. The patient having been prepared for operation in the usual way, on Nov. 17th, 1904, he was placed in the left Sims position, and an incision was made from the base of the

coccyx to about one inch behind the anus. The coccyx was freed and removed entirely. The rectum was then freed in all directions so as to allow that part of it in which the growth was situated to be brought well up into the wound. The wound itself was next packed with gauze and gauze was placed around that portion of the rectum which was to be opened. An incision was made into the posterior wall of the rectum to one side of the growth and that portion of the bowel from which the tumor was growing was excised together with half an inch of healthy tissue around it. The portion of the posterior rectal wall removed measured three square inches. The wound in the mucous membrane was closed by a continuous suture and another line of suture was used to close the muscular coats. A small drainage tube was inserted in the upper part of the wound and the skin wound was then sewn up.

The patient made a practically uninterrupted recovery. A slight rise of temperature occurred on the third day and continued till the fifth day after operation, disappearing after the bowels were opened. He was discharged from the hospital a fortnight later. The last time that he reported himself he was perfectly well and only a slight narrowing of the bowel could be felt in the rectum at the original site of the tumor. Microscopically the growth presented the ordinary appearance of a papilloma; there was, however, some small-celled infiltration of its base and a slight ingrowth of the epithelium suggestive of commencing malignant degeneration.

As I have already mentioned, papillomata of the rectum are by no means common, rather less than forty cases in all having been recorded. The form of rectal papilloma most usually described is of the nature of a villous tumor, similar to the villous tumors which are found in the bladder. The growth in this case was sessile and its surface was nodular rather than villous. An interesting point is the fact that so large a portion of the posterior wall of the rectum can be removed (in this case three square inches) without causing any serious narrowing of the lumen of the bowel. As far as the patient was concerned the restoration of function was complete, the loss of the coccyx causing him no inconvenience.

A Case of Ectopia Testis. E. OWEN THURSTON, M.B., B.S. (LOND.),
F.R.C.S. (ENG.), Captain, I.M.S., in *The Lancet*.

The patient was a Bengali child, aged five years, who was admitted to the Medical College Hospital in Calcutta on April 14th, 1904. He was an orphan and was an inmate of a missionary home, and the condition now to be described had only just been noticed. He was himself unable to give any information as to whether the testicle had always been in that position.

On examination the right testicle was situated at the root of the penis. It was equal in size to the left one, appeared normal in every respect, and was freely movable, but after being displaced by manipulation it always returned to its original position. The right side of the scrotum was well developed. On April 18th the testicle was exposed by an oblique incision, beginning at the external ring and extending half way down the length of the scrotum. It was found to be well formed and the tunica vaginalis was of the normal size and was closed. It was connected to the surrounding tissues by a few loose adhesions, without any recognizable attachment of the nature of a band which might possibly have been a remnant of the gubernaculum. After the separation of these adhesions it was easily brought down to the bottom of the scrotum and fixed there by a few silk sutures. The wound healed by primary union and the boy was discharged from the hospital at the end of ten days. He was seen again on September 10th when the testicle was at the bottom of the scrotum.

The interest of the case lies in the extreme rarity of the condition. Jacobson quotes two cases under the care of Dr. W. Popow, and Mr. Bilton Pollard had a case under his care. In the literature at my disposal I have been unable to find records of any other case.

Physician's Library.

Preface to a Compound of Medical Chemistry. By HENRY LEFFMANN, A.M., M.D. Fifth edition, revised. 12mo, 200 pages. Cloth, \$1.00 net. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street.

It has been said that Alexander Pope is a poet whom everybody quotes and nobody reads. It may be said of Compendes that they are books that most professors and reviewers condemn, and that nearly all students use. The truth is, that in the present systems in professional schools, students are obliged to meet two distinct requirements. They must study for the knowledge necessary for the practice of the profession and they must study to pass examinations. The latter are in so many cases arbitrary in scope, and affected by the personal equation of the examiner, that the student cannot be blamed for resorting to a concise presentation of the more important facts of the science, supplementing this by notes of the narrower and more strictly personal items of the teaching. Some teachers hold that note-taking is the best method, and are opposed to printed summaries, because these latter obviate the student's obligation to take notes. In a large experience with a class of students of the best type of those in American professional schools, I have been led to the view that voluminous note-taking is not a good method. The pronunciation of technical terms is so irregular, and many of them are so strange to students, that they are entered erroneously in the notes and serious errors may be made and persist. The written word is necessary to full knowledge; the compend affords this aid. The merit of any compend will depend on the correctness of the statements and the clearness and conciseness of the text. Modern chemistry is so extensive in its range and variety of facts, and so highly specialized in its practical applications that careful selection is necessary, and this selection must be made with reference to the students, for whom the work is intended. It is not out of the way to indicate in the title the basis of such a selection. Lately, an eminent chemist has formally objected to the use of the phrase "Medical Chemistry," asserting that

chemistry is chemistry without reference to the applications. I cannot agree with this view. The fundamental principles of chemistry are, it is true, the same to all students, but no teacher gets more than a few lessons into the subject before differentiation becomes necessary. The student in engineering does not need, and should not receive, the same treatment of the topic that the student of medicine receives. The whole science cannot now be taught to anyone. The main object of professional schools is to fit students for practical work, and the text-books should be written with this point in view. For a book intended for medical students, it is not only appropriate, but it is also advisable that the title should indicate its purpose. The mere title "Chemistry" will not inform correctly as to its scope. In a large work, intended for general reference, such limitation is not needed. I hold that "Medical Chemistry" is as appropriate a title as "Analytical Chemistry," "Physical Chemistry" or "Organic Chemistry."

Dose-Book and Manual of Prescription-Writing: With a List of the Official Drugs and Preparations, and the More Important Newer Remedies. By E. Q. THORNTON, M.D., Assistant Professor of Materia Medica, Jefferson Medical College, Philadelphia. Third edition, revised and enlarged. 12mo., 392 pages, illustrated. Philadelphia and London: W. B. Saunders & Company. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1905. Bound in flexible leather, \$2.00 net.

A glance at the contents of Dr. Thornton's book fully explains its attainment of a third edition. In addition to the consideration of the official and the more important nonofficial preparations intended for internal administration, weights and measures, solubilities, and incompatibilities, attention is given to the grammatic construction of prescriptions, illustrated by examples. In revising the text for this edition Dr. Thornton has made it conform with the new (1905) Pharmacopeia, the radical change in strength or name of many chemicals, drugs, and preparations already official, and the admission of many newer remedies necessitating the rewriting of a number of sections. We notice

in the appendix an addition of much value—a table showing the change in strength of important preparations, and also a list of average doses for adults in accordance with the new Pharmacopeia. Dr. Thornton's Dose-Book is, as it always has been, accurate and up-to-date.

International Clinics. Volume III. Fifteenth Series. J. B. Lippincott Co.

This volume is quite up to the well-known standard of excellence which characterizes this quarterly. Among the articles of special interest may be mentioned: "The Therapeutic uses of the Rontgen Rays, or Radiotherapy," a most interesting article, covering about forty pages, and dealing with the technic and effects of treatment in such conditions as sycosis, psoriasis, eczema, lupus, nevi, keloid, and malignant diseases. (Paper by George C. Johnston, M.D., Lecturer on Radiotherapy, Western Pennsylvania Medical College, Pittsburg): "Injuries and lesions following the toxic use of alcohol" (by T. D. Crothers, M.D.) "Paraffin injections by the cold process," (by M. Broeckaert, M.D.), and a very interesting clinical lecture by Prof. Brower, of Chicago, on "Paralysis agitans, hemiplegia, combined sclerosis and ataxia paraplegia, locomotor ataxia, and acute confusional insanity."

A Text-Book on Modern Materia Medica and Therapeutics. By A. A. STEVENS, A.M., M.D., Lecturer on Physical Diagnosis, University of Pennsylvania; Professor of Pathology, Woman's Medical College of Philadelphia. Fourth edition, revised. Octavo of 670 pages. Philadelphia and London: W. B. Saunders & Company. 1905. Cloth, \$3.50 net. Canadian Agents: J. A. Carveth & Company, Limited, 434 Yonge Street, Toronto.

The new fourth edition of Dr. Stevens' excellent work on practical therapeutics appears at a most opportune time, close upon the issuance of the Eighth Decennial Revision of the Pharmacopeia to which it has been adapted. Dr. Stevens, by his ex-

tensive teaching experience, has acquired a clear, concise diction that adds greatly to his work's pre-eminence. New articles have been added on Scopolamin, Ethyl Chlorid, Theocin, Veronal and Radium, besides much new matter to the section on Radiotherapy. The numerous changes in name or strength of various drugs and preparations, as called for by the new Pharmacopeia, have also been made. In fact, it is somewhat difficult to speak of Dr. Stevens' Therapeutics without resorting to the frequent use of superlatives, for of all the good works on this most important subject, this book before us is undoubtedly the very best.

Nervous and Mental Diseases. By ARCHIBALD CHURCH, M.D., Professor of Nervous and Mental Diseases and Medical Jurisprudence in Northwestern University Medical School, Chicago; and FREDERICK PETERSON, M.D., President of the State Commission in Lunacy, New York; Clinical Professor of Neurology and Psychiatry, Columbia University. Fifth edition, revised and enlarged. Octavo volume of 937 pages, with 341 illustrations. Philadelphia and London: W. B. Saunders & Company. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1905. Cloth, \$5.00 net; half morocco, \$6.00 net.

It is not at all surprising to us that a fifth edition of Church and Peterson's work should be necessary. Indeed, such a success was to be expected from what is undoubtedly the most complete and authoritative volume on nervous and mental diseases to-day. In preparing this edition Dr. Church has carefully revised his entire section, placing it in accord with the most recent psychiatric advances. In Dr. Peterson's section—Mental Diseases—the Kræpelin classification of insanity has been added to the chapter on classifications for purposes of reference, and new chapters on Manic-Depressive Insanity and on Dementia Præcox included. While the changes throughout have been many, they have been so made as but slightly to increase the size of the work. A number of the illustrations have been replaced by newer and better ones. We can confidently say that this work will maintain the reputation already won.

Gall-Stones and Their Surgical Treatment. By B. G. A. MOYNIHAN, M.S. (London), F.R.C.S., Senior Assistant Surgeon to Leeds General Infirmary, Leeds, England. Second edition, revised and enlarged. Octavo of 458 pages, beautifully illustrated. Philadelphia and London: W. B. Saunders & Co. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. 1905. Cloth, \$5.00 net; half morocco, \$6.00 net.

The first edition of Mr. Moynihan's work on gall-stones was completely exhausted in eight months. Mr. Moynihan, by his masterly presentation of operative technic and clear, logical discussion of indications and contraindications, has won an enviable place in contemporary abdominal surgery. In this edition, increased in size by some seventy pages, many additional case records have been incorporated and a number of new illustrations added. We note also the addition of a very valuable chapter—Congenital Abnormalities of the Gall-Bladder and Bile-Ducts. It is evident that the whole text has undergone a careful revision and all recent work along the line of gall-stone surgery included. Mr. Moynihan's book still holds first place in its field. The illustrations are very beautiful, especially the nine colored plates.

Essentials of Materia Medica, Therapeutics, and Prescription Writing. By HENRY MORRIS, M.D., College of Physicians, Philadelphia. Seventh edition, thoroughly revised. By W. A. BASTEDO, Ph.G., M.D., Instructor in Materia Medica and Pharmacology at the Columbia University (College of Physicians and Surgeons), New York City. 12mo, 300 pages. Philadelphia and London: W. B. Saunders & Company. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1905. Cloth, \$1.00 net.

The student cannot find a better or more practical work on Materia Medica, Therapeutics, and Prescription Writing than this little essentials from the press of W. B. Saunders & Company. But then, this work is no exception in this respect to all the other numbers of this excellent series of compends. Dr. Bastedo, in revising the book for this seventh edition, has brought

it in accord with the new (1905) Pharmacopeia, introducing all the new remedies and carefully indicating their therapeutic doses and uses. For a work of three hundred pages it contains a mine of information so presented as to be easily grasped. We give it our unqualified endorsement.

The Practitioners' Visiting List (Heretofore known as the *Medical News Visiting List*) for 1906. An invaluable, pocket-sized book, containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classical blanks. The 60-Patient Perpetual consists of 256 pages of blank alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil and rubber, and calendar for two years, \$1.25. Thumb-letter index, 25 cents extra. By mail, postpaid, to any address. Descriptive circular showing the several styles sent on request. Philadelphia and New York: Lea Brothers & Company, Publishers. 1905.

Being in its twentieth year of issue, *The Practitioners' Visiting List* embodies the results of long experience and study devoted to its development and perfection. It is issued in four styles to meet the requirements of every practitioner; "Weekly," dated for 30 patients; "Monthly," undated, for 120 patients per month; "Perpetual," undated, for 30 patients weekly per year; "60 Patients," undated, for 60 patients weekly per year. The text portion of *The Practitioners' Visiting List* for 1906 has been thoroughly revised and brought up to date. It contains among other valuable information a scheme of dentition; tables of weights and measures and comparative scales; instructions for examining the urine; table of eruptive fevers; incompatibles, poisons and antidotes; directions for effecting artificial respiration; extensive table of doses; an alphabetical table of diseases and their remedies and directions for ligation of arteries. The record portion contains ruled blanks of various kinds, adapted for noting all details of practice and professional business. Printed on fine, tough paper, suitable for either pen or pencil, and bound

with the utmost strength in handsome grained leather, *The Practitioners' Visiting List* is sold at the lowest price compatible with perfection in every detail.

Photographic Atlas of the Diseases of the Skin, in four volumes.

A series of ninety-six plates, comprising nearly two hundred illustrations, with descriptive text, and a treatise on cutaneous therapeutics. By GEORGE HENRY FOX, A.M., M.D., Professor of Dermatology, College of Physicians and Surgeons, N.Y. Consulting Dermatologist to the Department of Health, New York City. Physician to the New York Skin and Cancer Hospital, etc. Volume III. Philadelphia and London: J. B. Lippincott Company.

Volume three continues the high standard set by volumes one and two. The subjects treated of are lepra, lichen planus, lichen ruber, lichen scrofulosus, lupus erythematosus, lupus vulgaris, miliaria, milium, molluscum, morphœa, mycosis fungoides, naevus pigmentosus, naevus vaccularis, onychia, papilloma lineare, pemphigus, phtheiriasis, pityriasis, pityriasis rubra and psoriasis. The illustrations are beautifully gotten up and nicely arranged. In this volume the list numbers twenty-three plates. The text is clear, concise, accurate, practical. The tinting of the plates adds high value to the entire work, and makes them almost real and life-like. Essentially a work for those in general practice, when once procured, the wonder is that any one could do without it. We heartily recommend it and incidentally mention that correspondence regarding the atlas may be taken up with the Canadian representative, Mr. Charles Roberts, Ontario Street, Montreal.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only \$2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVI.

TORONTO, JANUARY, 1906.

No. 1.

COMMENT FROM MONTH TO MONTH.

We wish all who read these pages a prosperous New Year.

To our mind the most notable and valuable addition to Canadian medicine in 1905 was the publication of Dr. Adam H. Wright's Text-Book of Obstetrics, a text-book which should be authorized and recommended by all faculties of medicine in Canada.

Names of men of world-wide repute, such as Howard Kelly, Ochsner, Pritchard, Caird, appeared with original articles of great value in our pages during 1905. There were, indeed, in the

two volumes of that year many very valuable papers, a great number of reports of clinical cases of much interest, and a whole lot of news, to say nothing of two very fine and readable papers on John Harvey and Thomas Sydenham, from the pen of one who has been spoken of as the Weir Mitchell of Canada.

To those subscribers of this journal who have made us practical demonstration that they are subscribers and not simply "takers," we desire to extend our sincere thanks for their tangible evidence of interest and support; and widespread as that support has been in every province of the Dominion, as well as in several States of the American Union, we think we are correct in saying that any one of our twelve numbers, enclosed within its covers, had material value for the return we asked. There are, however, two departments of our journal, our friends should fill, namely, the correspondence pages and the pages devoted to clinical reports. We would like to have a correspondence department, like *The Lancet* or the *British Medical Journal* has. We would like to have a clinical department, which everybody can contribute to and would contribute to.

And we are right in saying a good word for our advertisers; because we have with us the best houses in the business, and we desire that our readers should patronize our advertisers. The relationship between the doctor, the manufacturing pharmacist and the medical journal should be a cordial one, but who shall determine just what position each shall take. At the present time this is a burning question across the border, and from communications we have received from time to time, we gather that some of our men here in Canada are interested in it. There are

few medical journals published that could exist on subscriptions alone, and no doubt every medical journal now in the field is doing some good to somebody. A little knowledge is said to be a dangerous thing, consequently we all strive to get all the knowledge we can, for then we get beyond the danger line. Some get good from one journal, others from another. But casting a hurried glance over the entire field, the most despicable thing that we know of is where some firm that does not advertise their goods in the medical press at all, who cares nothing for the medical literature of the day, profiting by some doctor or surgeon mentioning their product in a paper, a leading medical journal publishing that paper, and then the firm sending reprints of it broadcast. That is the sort of thing that the entire medical profession should sit on *en bloc*.

Arrangements are well under way for the annual meeting of the British Medical Association in Toronto next August. The fact that the British Medical Association is going to meet here at that time is known to every doctor in the land already. And he can be kept apprised of the exact dates by the medical and the public press. In addition to these there are many doctors in Canada who take either the *British Medical Journal*, *The Lancet*, or some of the weeklies of the United States. These are all being kept supplied with news regarding this meeting. There will probably be a whole lot of talk of advertising, and a whole lot of correspondence on the subject as to railway arrangements, rates, etc., which, in a measure, is largely useless and superfluous, because of the fact that there is one thing that everybody has got to do, and that is buy a ticket. When railway and other transportation companies make these arrangements for conventions at reduced rates, it is their business. They are making these arrangements to get business, consequently all ticket sellers and

agents are promptly notified by their respective companies what rates are in force and what are the time limits, and all information in that respect can be gotten by any doctor from his local ticket agent.

X We learn through the medium of the public press that a petition signed by over 1,200 medical students was recently presented to the Hon. Minister of Education in the Province of Ontario, Dr. R. A. Pyne, who is also the Registrar of the Ontario Medical Council, which prayed that the Government of Ontario should introduce at the coming session the necessary legislation to ratify the Canada Medical Act of 1902, better known as the Roddick bill. From the same source we gather that every province in Canada, with the exception of Ontario, Quebec, British Columbia, and the two new provinces of Alberta and Saskatchewan, have passed this necessary ratification legislation. That is to say, the great mass of the medical population of Canada has not seen fit to push for its ratification. True, it has been before the Legislature of the province of Quebec, and was refused. But why it has never been ratified by the Legislatures of Ontario and British Columbia, we do not know. We do not think that it has ever been presented to the Legislature of Ontario. It may have been authorized by the Ontario Medical Council or it may not. The fact remains that Ontario has set no example, and we believe that the promise was given by the present Premier before the last elections that the Canada Medical Act would be ratified in this province once he became Premier. We believe that when the matter is put before Premier Whitney in the proper light, that he will redeem that promise. There are many questions of state which have up to the present engaged his attention, and this has not been forced upon him. It is most desirable that in this province ratification legislation be passed forthwith, if for nothing more than to exert an educating influence.

NOW is the time to send in your subscription to the Canadian Medical Protective Association, the very best medical organization in existence in Canada, and the very best product of the Canadian Medical Association. The latter brought the former into existence; but while the latter has a membership of 1,500, the former only has a membership of somewhere near 300. Write your cheque—and you are lucky to have a bank account—for \$3.00; that is the membership fee now. Tack on to it fifteen cents for collection, because you can stand that better than the Association can; send it to Dr. J. A. Grant, Jr., Ottawa, Ont. But do not be content with sending in your own annual fee. Do not rest at that. Remember you have some interest in your profession and in the other members of your profession. Get your next-door neighbor to send in his fee. He may say that he does not need it. He does. We all need it. He may say he never does surgery. All the more he should help to protect the man who does his surgery for him. But it is most remarkable that while there are several consulting physicians who support this organization on principle, the very man who should patronize it most, the surgeon, in several instances, has never been a member of it. Isn't this strange? No. It is only carelessness. This Canadian Medical Protective Association should have a membership of at least 3,000. In fact, we cannot see how any one refuses to become a member. Personally we have forwarded our cheque for 1906, although we believe that the Association should have drawn upon us at the first of the year as a reminder. Would any one refuse a draft of this character? Here is an Association admittedly of the very best good to each individual man in the medical profession in Canada. Nobody is making any money out of it, and all those who are in it desire to see everybody else in it. It has done good work and has proven itself worthy. It can do good work and will do good work for the entire medical profession of Canada. In the great majority of instances suits are brought for alleged malpractice

by a designing, penurious pettifogger of the law, who in most instances should have his gown torn from his shoulders. And if the truth were known, we believe that it would be found that most of those who prosecute these suits would be unable to put up security for costs. It is inconceivable that all are not members of this Association.

News Items.

THE deaths in Toronto in 1905 numbered 3,915.

THERE were 3,060 marriages in Toronto in 1905.

IN 1905 there were 968 births and 472 marriages in St. John, N.B.

DR. D. MCBAIN, London, Ont., is ill of typhoid fever at Rainy River.

HOSPITAL Sunday in Winnipeg netted the Winnipeg General Hospital \$1,796.71.

DR. W. J. ARNOTT, Berlin, Ont., died on the 12th of December, aged 43 years.

THERE were 132 inmates in the Toronto Home for Incurables during 1905.

DR. R. H. RICHARDS, Winnipeg, has gone for a holiday to Honolulu and Australia.

DR. MACDOUGALL KING, Ottawa, is suggesting medical inspection of schools in that city.

HAMILTON, Ont., wants a smallpox hospital at \$4,000, and an isolation hospital at \$50,000.

DR. E. C. ASHTON, Brantford, has been gazetted an associate coroner for the County of Brant.

THERE were 67 new patients admitted to the Vancouver General Hospital during November, 1905.

THE Medical Faculty of the University of Toronto has subscribed \$50,000 to the Toronto General Hospital.

THE death is announced in Chicago of Dr. Frederick Lapsley, formerly of Toronto, at the age of 37 years.

THE new Vancouver General Hospital was to have been ready for occupation the last week of December, 1905.

MONTREAL City Council grants \$1,000 a year to the work of the Montreal League for the Prevention of Tuberculosis.

THERE were 68 deaths in Hamilton, Ont., during Dec., 1905, four being from contagious diseases and seven from consumption.

MISS BENNETT, of the General Hospital, Montreal, has been appointed Lady Superintendent of the Brockville General Hospital.

DURING the week ending the 6th of January there were only sixty-eight deaths in Montreal. The average weekly mortality is 125.

THE Woman's Hospital Aid Society, of Winnipeg, has presented the Winnipeg General Hospital with a cheque for \$651.32.

DR. JOHN KANE, of Aultsville, Ont., near Cornwall, was killed in a runaway accident on the 7th of December. He was 31 years of age.

THE death is announced of Dr. O. S. Strange, of Kingston, Ont., which took place on the 2nd of January, 1906. Deceased was born in 1826.

A TUBERCULOSIS camp is to be established in Montreal, by the Montreal League for the Prevention of Tuberculosis. The camp will be a temporary one.

THE typhoid situation in different districts in the interior of British Columbia, is said by Provincial Health Officer, Dr. C. J. Fagan, to be well in hand.

TORONTO is increasing in population naturally as well as artificially. In 1901 the births were 4,445; 1902, 5,065; 1903, 5,040; 1904, 5,283; 1905, 5,816.

DR. J. A. SABOURIN, of Point St. Charles, Quebec, died at the Hotel Dieu Hospital, Montreal, on the 28th of December, of typhoid fever. He was thirty years of age.

SIR JAMES GRANT, Ottawa, has received a letter of thanks from King Edward VII., for a copy of the lectures Sir James delivered last summer in Scotland on Tuberculosis.

THE Provincial Health Department of British Columbia are taking very active steps for suppressing typhoid epidemics in various sections in the interior of that province.

THE number of patients treated in the Winnipeg General Hospital from January 1, 1905, to November 30th, 1905, was 4,014, as against 3,509 for the same period in 1904.

It is understood that in the very near future the site for the new Toronto General Hospital will be chosen, and the erection of the out-door departments at once proceeded with.

EX-MAYOR URQUHART, of Toronto, on leaving office inaugurated a fund for the Toronto General Hospital, contributing \$100 to it and inviting 999 other citizens to do likewise.

FIRE destroyed one of the cottages for female patients at the Mimico Provincial Hospital, on Sunday morning the 31st of Dec., 1905. The damage amounted to \$15,000, but the inmates all escaped owing to absence at religious services.

DR. GEORGE CAEHERT, formerly of Orangeville, Ont., died at his home in Toronto on the 2nd of January, aged 80 years.

DRS. J. L. AND W. S. TURNBULL, Goderich, Ont., have dissolved partnership. Dr. A. T. Emmerson, of Claude, Ont., succeeds Dr. J. L. Dr. J. L. goes abroad in February.

ON the evening of Dec. 21st, 1905, the medical students of the Manitoba Medical College celebrated their 23rd annual banquet. One hundred and fifty guests were present.

IN the Winnipeg General Hospital during the week ending January 6th, there were 357 patients, 222 being men, 86 women, and 49 children. There were 111 in the out-patient departments.

THE Montreal League for the Prevention of Tuberculosis will hold a public meeting in that city in February, when His Excellency the Governor-General will be present and deliver an address.

DR. ROBERT MITCHELL, Amherst, Nova Scotia, died on the morning of the 27th of December, aged 73 years. Deceased was Surgeon for the Maritime Penitentiary at Dorchester, N.B., for 21 years.

ON Nov. 30th, 1905, there were 302 patients in the Toronto General Hospital. During December, 279 patients were admitted and 310 discharged, leaving 271 patients in the institution at the end of the year.

DR. BELL, of the Provincial Board of Health of Ontario, has returned from a tour of inspection of the lumber and mining camps of New Ontario, and reports that they are all in good sanitary condition.

THE law in Ontario regarding vaccination requires that within three months after birth, parents shall present the child for vaccination before one duly authorized to perform same, and again in eight days for verification of the vaccination.

THAT a member of the Toronto Board of Education calls for the abolition of compulsory vaccination in school children is no cause for the citizens to dread an epidemic of smallpox.

THE Toronto Free Hospital for Consumptives had 136 patients in advanced stages of the disease in its first hospital year. Over 5,000 visitors were at the institution during that year.

WHEREAS the late Liberal Government in Ontario collected \$36,786.08 for private interests in the Provincial hospitals for the last four months of 1905, the present administration has collected \$66,712.51.

A MEMORIAL has been established for the benefit of the Montreal General Hospital, and is called the Charles Alexander Memorial, in honor of one who always took a deep interest in the welfare of this hospital.

DR. ELZEAR PELLETIER, Secretary of the Quebec Board of Health, has returned to Montreal after attending the Congress on Tuberculosis at Paris. According to him the Congress completely ignored Marmoreck's serum.

THE Margaret Scott Nursing Mission, of Winnipeg, made 1,003 visits during December, 1905, as against 528 in December, 1904. The number of visits paid to typhoid fever patients was 291, and on obstetrical cases, 186.

IN 1901, the Winnipeg General Hospital treated 2,773 patients; in 1902, 2,928; 1903, 3,354; 1904, 3,868; 1905, 4,366: in the out-door, the numbers were as follows: 1,607, 1,363, 3,483, 4,772, 5,735. The deaths in 1905 were 332.

THE annual meeting of the Canadian Association for the Prevention of Tuberculosis will be held in Ottawa the last week in March. Dr. A. J. Richer, of Montreal, will deliver an illustrated lecture upon Consumption, and the measures used for its prevention. Senator Edwards will lay the question of what the Federal Government can best do to assist in stamping out the plague, before the Hon. Minister of Agriculture at an early date.

THERE were 76 patients in Grace Hospital, Toronto, on November 30th, 1905: 99 patients were admitted during December. There were 15 births and 7 deaths. Ninety-four patients were discharged, and 89 were left in the hospital on the 31st of December.

IN 1905 there were 2,615 cases of contagious disease in Montreal. Of this number 529 were diphtheria, 223 scarlet fever, 392 typhoid fever, 929 measles, 5 roseola, 33 varicella, 94 whooping cough, 405 tuberculosis, 4 trachoma, 3 cerebro-spinal meningitis, and 2 erysipelas.

THE building at the corner of Bay and Richmond Streets, Toronto, known as the Medical Building, has been sold for \$100,000, and the College of Physicians and Surgeons of Ontario have authorized Dr. Arthur Jukes Johnson and a special committee to secure a new site.

MISS ALICE B. SINCLAIR, a graduate of the Toronto General Hospital, and the Sloane Maternity Hospital, New York, has just been appointed Lady Superintendent of the Burnside Department of the Toronto General Hospital, succeeding Miss N. McKellar, who held the position for seventeen years.

THE Hamilton Medical Association held its annual business meeting and banquet recently. Dr. Ingersoll Olmstead was elected President, Dr. D. G. Storms, Vice-President, and Dr. McNichol, Secretary-Treasurer. Fifty-five were present at the banquet. The retiring President was Dr. H. S. Griffin.

THE Board of Trustees of the proposed new General Hospital for Toronto will comprise twenty-five members, eight to be appointed by the Ontario Government, five by the University of Toronto, five by the city of Toronto, and seven by the benefactors. Any one can become a benefactor by donating \$500 to the institution. After the Act of Incorporation comes into force this will be \$1,000. The wards, so far as medical students are concerned, shall be for the benefit of those only of Toronto University.

TORONTO General Hospital staff. The following have been appointed for the usual six months' service: In surgery, Dr. T. D. Archer, Campbellford, Ont.; Dr. J. H. Soady, Toronto; Dr. J. H. Kidd, Peterboro. In medicine, Dr. K. H. Van Norman, Toronto; Dr. F. W. Ralph, Markham, Dr. F. J. Buller, Toronto.

THE attention of the profession throughout the province is called to the Annual Meeting of the Ontario Medical Association for 1906, under the Presidency of Dr. George A. Bingham, of Toronto, and with Drs. D. J. Gibb Wishart and H. J. Hamilton as chairmen respectively of the committees on papers and business and of arrangements.

By vote of the members at the last meeting, that of this year will take the form of a business session, preceding the meeting of the British Medical Association, which will begin August 21st. Consequently our provincial meeting will be convened Monday evening, August the 20th, at 8 o'clock. We will thus avoid conflicting with the necessary sessions of the Canadian Medical Association, and the members will arrive none too early to participate in the Imperial meeting of the next day.

Members are particularly requested to remember this announcement. Notification of the various committees will be made at the accustomed date.—Chas. P. Lusk, General Secretary.

Correspondence.

To the Editor of DOMINION MEDICAL MONTHLY.

Dear Sir,—For more than ten years I have been convinced that cancer is a contagious disease, the cause of the contagion being either a microbe or a cell contained in the discharges. I am now gathering facts to prove this, and that the disease is not hereditary, as has been generally supposed. In view of the complete change of opinion with regard to the contagiousness of Tuberculosis I have hopes that within a few years we may see the same beneficent change in the views of the profession and the public with regard to cancer, provided that the truth warrants such a change. One of the facts which has become very apparent from the study of my own cases of cancer is that it has been the exception for them to have lost a parent from that disease, while nearly all of them had come in contact with it in people who were not their parents. Through your columns I want to ask the profession of Canada whether they know of any cases of cancer whose parents never had it, and if so if they would kindly communicate such facts to me. It would also be interesting to hear whether there is any village they know of which has been absolutely exempt from cancer until a case was imported from some other place, after which many other cases cropped up.

Any one sending me facts bearing upon these two important points will receive due credit in an article which I am preparing for the Toronto meeting of the British Medical Association this year. I recently published a paper declaring that cancer was becoming very rare in my public and private practice, and I attributed this to the fact that every woman with a lacerated cervix had the latter either repaired or amputated, so as to remove the scar tissue, on which cancer mostly thrives. Since this paper appeared I have received a communication from a prominent gynecologist of Boston, saying that he had had the same experience. I believe that a woman with cancer of the cervix is a centre of infection for all her friends and neighbors among whom there will develop cases of cancer of the lip, tongue,

throat, stomach, intestine, or wherever there is scar tissue. If my contention be correct, how important it is to make the fact known so that there may be a crusade for stamping it out by early operation, or when a case is discovered too late for this, then by isolation and disinfection. I am sure that no more important subject has ever occupied your pages than the investigation of the origin and spread of this terrible disease.

Yours very truly,

248 Bishop Street, Montreal.

A. LAPHORN SMITH.

Publishers' Department

WE desire to call the attention of our readers to the announcement of the Lambert Company, on second cover page, who were awarded a gold medal for the perfection of their sterling product, "Listerine," at the Lewis & Clark Exposition at Portland, Oregon, last year.

HEAVY COLDS.—The rheumatic and grippy conditions which so frequently accompany heavy colds are sometimes overlooked. By the prompt use of Tongaline the irritating features of these conditions are ameliorated and the congestion is relieved, while the great stimulating action of Tongaline on the liver, the bowels, the kidneys and the pores, quickly expels the poisons which are the cause of the trouble.

PNEUMONIA.—"The pneumonia season is rapidly approaching. Soon the various journals will be full of the statistics of past years in regard to the prevalence and fatality of this disease. The pathology and etiology will be thoroughly gone over, but, judging by the past, most writers will have very little that is encouraging to say as regards treatment. Several points, nevertheless, must be kept in mind. Whatever drugs are used internally (and this depends very much upon the individual case), the patient must have plenty of fresh air. Do not be afraid of his taking cold on account of the cold air blowing across his face. It is now considered that this is impossible. Also, whatever drugs may be used, keep the body warm with suitable clothing, and use externally some preparation which will cause a comparative lessening of blood-pressure in the lungs. Cold applications, beside lowering the vitality of the patient, cause a depletion of the superficial vessels, and consequently increase the hyperemia in the lungs themselves. Our attention then would be drawn, per contra, to hot applications. To the most of these

there are very great practical objections, such as their inconvenience, their tendency to grow cold very rapidly, and the fact that they must frequently be renewed, thereby disturbing the patient's rest to his manifest detriment. We have found but one form of hot application which seems to us to entirely fill the bill, and that is Antiphlogistine. By its means the vitality of the body is conserved, the blood is attracted to the surface and away from the lungs (its hygroscopic action remarkably enhancing this effect), and the tone of the heart's action is maintained. Beside this, its frequent renewal is not necessary, and the patient's rest is not thereby disturbed. Practically we know that by its use the patient is made much more comfortable, the fatality is much decreased, and if abortion of the disease is possible, we believe it can be accomplished better by this means than by any other."—*Kansas City Medical Record*. October, 1905.

FISHING AND SHOOTING.—A new region, known as the "Temagami" (pronounced Tem-mog-a-me) District, is being brought to the notice of the public as one of the finest fishing and hunting confines in Canada. Excellent sport is assured all who take advantage of a trip to this magnificent territory which is situated 300 miles north of the city of Toronto at an altitude of 1,000 feet above the sea. Black bass, speckled trout, lake trout, wall-eyed pike and other species of fish are found here in abundance, and large game such as moose, caribou and deer abound in the forests. A handsome booklet, profusely illustrated, giving all information, including comprehensive maps, can be had free on application to J. D. McDonald, D.P.A., Union Station, Toronto.

MERCURIAL INUNCTIONS IN SYPHILIS.—In America the profession as well as the laity have not taken so kindly to this method of administering mercury as they have in the European countries. The same may be said with reference to the use of hypodermic injections of solutions of the salts of mercury. When the disadvantages and in some cases the disastrous results attendant upon a long-continued course of treatment by mouth are

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVI.

TORONTO, FEBRUARY, 1906.

No. 2.

Original Articles.

ANTE AND POST-PARTAL EXAMINATIONS.*

BY FREDERICK FENTON.

Associate in Obstetrics, University of Toronto.

Mr. Chairman and Gentlemen,—A few months ago I read a short paper touching upon some of the points contained herein, but I believe the subject is sufficiently important to warrant a further reference to the matter, and trust that those of you before whom the question was discussed on a previous occasion will bear with me if I find it necessary to repeat some things which were said at that time.

ANTE-PARTAL EXAMINATIONS.

Under this heading I include: (a) General examination of mother. (b) Urinary examinations. (c) Special abdominal examination, including pelvimetry. (d) Vaginal examinations.

General Examinations.—The history of the patient will, of course, have a great deal to do with the extent of our general examination, but a careful examination should always be made of her heart at a period sufficiently long before the probable date

*Read before the Ontario Medical Association, June 1905.

of confinement to allow of the timely adoption of measures for her safety in case a cardiac lesion should be found.

The examination of the lungs at the same time can easily be carried out, and should always be done where there is anything in the history or appearance of the woman to suggest the probability of pulmonary trouble.

The routine investigation of the condition of the heart and lungs, not only at times gives most valuable information where least expected, but serves very frequently "to break the ice," with timid and bashful primiparæ, and make other examinations less embarrassing and consequently more thorough.

Urinary Examinations.—It is scarcely necessary for one to refer to the routine examination of the urine during pregnancy. These examinations should begin at the fifth month, and be continued at intervals till the pregnancy is terminated.

While it is true that there is a transient albuminuria in from 5 to 10 per cent. of pregnant women, and that eclampsia may occur without albuminuria, these may, I think, be regarded as the exceptions which prove the rule, that evidences of nephritis are found in the urine of women preceding an eclamptic seizure.

Abdominal Examinations and Pelvimetry.—By our examination and measurement of the pelvic bones we endeavor to, and, to a degree which is of value, do, secure useful information regarding the size and shape of the pelvis; by our abdominal examination we can diagnose the position and presentation of the fetus and form some idea as to the size of its head. One must not interpret the findings by external pelvimetry too literally, but, in a general way. The internal measurements of the pelvis do not bear a constant relation to the external, many things entering into the question which one cannot calculate absolutely. But in spite of this, one can get useful information by this method of examination and its routine use is advisable.

Pelvis may readily be divided into two great classes, viz., those which are certainly of a sufficient size for an average child to pass through, and those which may not be.

Having placed a case in class No. 1 we have no more anxiety on that score, while if it is assigned to class No. 2 we should make an internal examination of the pelvis, and settle the question definitely.

It would be superfluous for me to describe the method of making abdominal examinations since many here are familiar with the procedure, while those who have not been in the habit of making them can find full descriptions in any recent text-book on the subject.

A point which has been frequently raised in connection with the diagnosing of position and presentation by external examination about the beginning of the ninth month, at which time I would advocate it, is the fact that not infrequently the position will have changed before labor commences, and that, therefore, the information one has obtained is unreliable. That is not of much consequence, since the changes in the position of the fetus, which occur in the last two or three weeks, are usually from what one might term abnormal, to normal positions. Thus an occipito-posterior may change to an anterior, or a breech to a vertex, but seldom the reverse. Having examined, at the end of the eighth month, and found a vertex presentation in an anterior position, one can almost bank on it that the same condition will be found at labor; if, on the other hand, there be not a vertex presentation, or if the position is posterior instead of anterior, such may be found to have changed before or in the early part of labor. The knowledge that two or three weeks before there was an abnormal position or presentation, will put one on his guard, and he will be careful either to corroborate his previous diagnosis or ascertain by sure and certain signs what change in the position of the child has occurred in the interim. But not only can one diagnose the position and presentation of the child with greater ease and certainty, and less disturbance of his patient by external than by vaginal examination, but information as to the condition of abdominal wall, tumors, multiple pregnancy, dead child, etc., may be gathered which cannot be learned per vaginam at all, or only so late as to be of little service.

Vaginal Examinations.—Having made the diagnosis of position and presentation early in the ninth month and verified it, if possible, by the same method on first seeing the patient in labor, I make a vaginal examination, mainly for the purpose of ascertaining the condition of the cervix.

While one can distinguish between a vertex and non-vertex presentation per vaginam without difficulty as a rule, I must con-

fess that I do not care to trust too much to the tip of my finger for the recognition of the position of the head. Early in labor the presenting part is too high for satisfactory examination, while late in labor the caput tends to obscure things. When it is necessary to make a careful diagnosis per vaginam, I prefer to anesthetize the patient and pass as much of my hand into the vagina as is necessary to allow me to feel some feature sufficiently distinctive to settle the matter beyond all doubt.

By making a diagnosis before labor has set in, which, in the vast majority of instances will be correct, one can reduce the number of vaginal examinations to a minimum, greatly to the comfort and safety of our patients.

POST-PARTAL EXAMINATIONS.

These will, of course, include the ordinary examination of temperature, pulse, etc., which give us valuable information as to the general condition of the patient, but no special information as to the progress of involution.

Examinations for the purpose of determining the size of the uterus on successive days of the puerperium, was first done by Charpentier, of Paris (1880), who first attempted to do so by the daily use of the sound, but shortly abandoned that method for the pelvimeter, which he used by introducing one arm into the vagina, holding it against the cervix, while an assistant placed the other end on the fundus. Such procedures were too difficult and dangerous to secure general adoption, and consequently died an early death.

It was not for another fifteen years (1895) that anything further appears to have been written on this subject, when Drs. T. B. Stevens and W. S. A. Griffith reported before the Obstetrical Society of London the results of their investigations.

Their measures were external entirely, that part of the uterus lying above the symphysis being measured both vertically and transversely, the former being the more important and reliable. The instrument used for the taking of the measures was an ordinary two-foot rule.

In the following year McCann (*Brit. Med. Jour.*, 1896), recorded the results of observations made by him on the progress of involution. He used an ordinary tape-line and measured from the symphysis to the top of the fundus in the middle line.

These gentlemen recorded their observations on an ordinary temperature chart, the 100 deg. line being taken as the top of the symphysis, each degree above representing one inch.

This method of regularly measuring the height of the fundus above the top of the symphysis, and the charting of the same, was introduced into the Toronto General Hospital in the year 1901 by Dr. Adam Wright, and some of the material for this paper has been obtained from the records there, the balance being from private cases.

In the making of these measurements certain rules must be followed, otherwise one is apt to get results which may be misleading:

1. The measurements should be made daily and preferably as near as possible at the same hour each day.
2. The patient must have passed water within a very short time before measuring, and the obstetrician should satisfy himself that the bladder has been emptied, especially in the first two or three days of the puerperium.
3. If the bowels have not moved within twenty-four hours care must be taken that the rectum is not overloaded. Neglect of these last two precautions is probably the most frequent source of error.
4. The uterus should be gently massaged for a few minutes before measuring, so that one may always measure it in the same condition, and not in a state of contraction one day and that of relaxation the next.

Having excluded these sources of error one will find the fundus from five to six inches above the top of the symphysis pubis on the day after labor, and, if all be well, below the symphysis, in the vast majority of cases, by the end of ten days or two weeks. The rate and regularity of the fall may be influenced by certain things, some of which may be looked upon as pathological, and others as physiological. The progress of involution may be delayed by: 1. Multiparity. 2. Advanced years. 3. Lactation. 4. Prematurity of labor. 5. Prolonged labor. 6. Retention of secundines or blood clot. 7. Septic infection of the enmetrium. 8. Lacerations of the cervix. 9. Grave disturbances of health from any cause.

The curve in a primipara is normally about half an inch lower

than in a multipara. The descent of the fundus is rapid for the first few days, after which it becomes more and more gradual.

Failure of the fundus to fall on the day following confinement is very frequently found to be due to distended bladder, but if such occurs on subsequent days and continues for three or four days it will usually prove to be due to one of three of the causes of delayed involution referred to above, viz.: Retention of secundines or blood clot, septic infection of the endometrium, or laceration of the cervix.

The older the woman and the larger the number of children she has had, as a rule, the slower will be the fall of the fundus. Lactation has been found to impede rather than accelerate the progress of involution. Grave disturbances of health from intercurrent disease not necessarily connected with the pregnancy, will, of course, affect the removal of the excess of uterine tissue, just as it would influence other vital processes.

Failure of the fundus to descend for three or four days, or its sudden or gradual rise to a higher level than it had been, should lead one to make an investigation as to the cause, especially so if pulse rate or temperature be elevated. With elevated pulse and temperature it will probably be found to be septic in nature, and the sepsis will have extended to, or originated in, the endometrium.

Involution will not necessarily be interfered with, because there is sepsis, but only if the sepsis involves the uterus itself, causing local irritation or inflammation with the accompanying swelling and engorgement.

Cessation of involution for a few days with normal pulse rate and temperature, will, in a large percentage of the cases, be found to be due to laceration of the cervix.

One sees a chart every now and then, which apparently will not go according to rule, but just in this connection I may say that I have come to look with some suspicion upon measurements taken by anyone not familiar with the anatomy of the pelvis and abdomen. Too much should not be left to a nurse. They frequently produce the most extraordinary involution lines, which are quite incorrect. The following working rules have been drawn from a goodly number of carefully kept charts, upon which I base my remarks.

1. Where the fundus is falling there is no necessity or justification for the exploration of the uterine cavity. If sepsis exists it must be looked for elsewhere.

2. If involution has not progressed for three or four days a careful examination should be made of the genital tract.

3. Sub-involution, associated with other evidences of sepsis, indicates that the uterus is at least a point of infection, if not the only one, and as such requires our immediate attention. Remove all foreign substances and disinfect the endometrium, but do so with all gentleness. We should not forget that nature has ways of her own of preventing the entrance of infection to the blood and lymph streams, and should hesitate to break down (curette) her barriers until we have something better to substitute for them.

4. Sub-involution, with no suggestion of sepsis, is most frequently due to one of two causes, viz., retention of secundines or clot, or laceration of the cervix.

In the first case it is only necessary to remove the foreign substance. The treatment of cervical tears at this time is still a moot point, but, for my own part, I may say that the results of repair at the end of the first week have been most gratifying.

Not infrequently when exploring, according to the above rule, nothing has been found other than what appeared to be an unusual amount of lochia, frequently mucus in character, on disturbing the cervix, with the result, however, that the desired effect was secured. Apparently there was some obstruction to drainage, and the act of examination disturbed things sufficiently to remove the obstruction.

75 Bloor Street East.

Attacks of abdominal pain preceded by "rumbling" of the bowels is suggestive of some obstructive condition.—*American Journal of Surgery*.

Severe and repeated headaches may be due to the unsuspected presence of otitis media, with or without mastoiditis.—*American Journal of Surgery*.

ERYTHEMA GANGRENOSUM.*

BY E. R. HOOPER, B.A., M.B., TORONTO.

Mrs. W., aged 41.

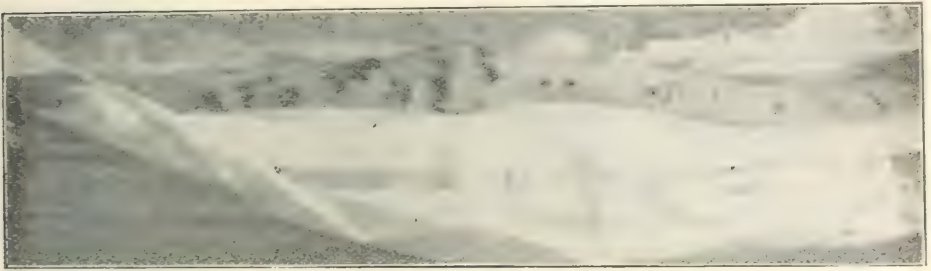
History.—On December 24th, 1904, patient had an attack of appendicitis, and though pain was present for many weeks, she would not consent to an operation till February 22nd. Following the operation an intestinal obstruction developed, and, though not complete, was sufficient to cause great embarrassment and markedly inflated the intestinal tract proximal to the site of constriction. The operation for the relief of this condition was performed on April 2nd, when I found a fibrous band passing from the anterior abdominal wall near the site of the operation scar, to the right iliac fossa. This band, passing over the ascending colon, produced the obstruction referred to.

Patient's condition was uneventful till June, when marked disturbances of the nervous stability were observed, and prevailed through the two succeeding months. The extremely emotional nature and conspicuous mental depression were attended with suicidal attempts and many expressions indicating an aversion to living. Patient has been twice married, but has had no children. Her last marriage has been one of incompatibility of taste and temperament, involving, constantly, much mental agitation and depression. This condition, together with the nervous anxiety associated with five months' confinement to bed, must be regarded as the chief agencies contributing to the nerve exhaustion or instability, which are doubtless underlying causes, in hysteria. Prior to December, 1904, the health of patient has been good.

History of Lesions.—During the second week in August the patient presented herself, stating that her arm had been scratched by a rusty stove-pipe wire. Within three days of wound a large, black, gangrenous area appeared over the site of injury, which was on the outer aspect of the upper arm.

*Read at Toronto Clinical Society.

This, the original patch, was circular, two inches in diameter, tough, thick, involving the skin and superficial fascia. This area of necrosis was succeeded by several smaller ones, some to the inner and some to the outer side of the larger and original one. These areas of necrosis were black from the first appearance of change, as if the destructive condition were here seen in its most virulent action. A patch, which is typical and average in its destruction, has a history as follows: First indication is subjective, there being an intense burning pain, followed in two hours or more by a large hyperemic area over the centre of pain. Inside this large reddened area are three zones representing three degrees of destructive activity. The dark, central zone of gangrenous tissue is the inner, surrounding this a ring of dark gray or yellow, defined by a deep red border,



and beyond this again, fading into the normal tissue, is the pale red hyperemic base which first appeared. We have thus a positive, comparative and superlative degree of injury in this order from the periphery towards the centre. In some cases the central dark area may extend to include the dark gray zone, and the two may subsequently necrose. In other spots the surrounding dark gray zone may regain its vitality, and the molar death is then limited to the central area. This erythema and subsequent gangrene do not rise above the level of the surrounding skin. It is only when repair takes place that the new tissue raises the necrosed tissue above the level in the form of a scab, and even this does not take place if moist dressings are placed over the oncoming or healing patches. In the course of ten days to two weeks the necrosed area has separated, and the underlying tissue resembles a deep ulcer with well-defined mar-

gins. The healing starts from the margin with ever-narrowing diameter, till a thick keloid scar occupied the site of the necrosed area.

These gangrenous patches commenced on the upper arm and took about two weeks to complete the invasion of the arm. There was a period in which no further patches were developed, but after this interval of four or five days the lower arm was attacked, and it required about two weeks for the process to complete its destructive action.

Two weeks intervened before the thorax was invaded, then the lesions appeared in succession upon the abdomen, thigh, leg, and foot. Up to this time the lesions were without exception unilateral, and extended up to the middle line, and showed no promise of involving the opposite side for at least a week after the first lesions appeared.

The right abdominal area and thigh later became involved, and though there was an occasional deep patch, for the most part the lesions were superficial and of less severity than those on the left side. They in fact resembled a herpes.

At first the history of the origin led one to regard the lesions as of a septic character, the infecting agent being the stove-pipe wire. There was, however, no lymphangitis and no elevation of temperature. The manner of onset and course pursued soon convinced one that there was what appeared to be a failure or disturbance of nutrition to certain areas. The term tropho-neurosis seemed to express the change that has occurred in these gangrenous patches.

These did not follow the areas of skin supplied by the branches of sensory nerves with any regularity, nor did they appear in the order of a progressive, descending lesion of the spinal cord or nerves.

Nor did these follow the areas of tissue controlled by the motor nerves. For example, from the 5th and 6th cervical nerve are derived branches which supply the supra-spinatus, infra-spinatus, subscapularis, teres major, deltoid, which were not involved, but they also supply fibres to the brachialis anticus, biceps whose epidermal tissue was destroyed. Nor could these be said to appear in a descending order, as patches would appear at higher or lower levels with much irregularity. It is

to be noted, however, that the areas of skin supplied with motor branches from the brachial, lumbar and sacral plexes were more involved than these areas between. The upper thoracic zone was but little affected.

Patellar reflex is present, may even be exaggerated. The plantar reflex in some instances was absent, but when present there is plantar flexion.

Sensation is markedly delayed on the left side, and the muscular sense is clearly impaired. Location of sensation was very faulty, nor was it possible for patient to say which toe was flexed or extended. On the right side these sensations were almost normal.

It is now two weeks since the gangrenous areas sloughed, and at present date, November 20th, the lesions on leg are in the state of healing ulcers. The arm has quite healed, but the thickened scars mark the site of injured tissue. On November 13th the patient had a chill, and, on taking the temperature, by mouth, it was 102 2-5; later on, taking per axillam, it was reported 109 and 109 2-5, respectively on two occasions. On enquiries I found that a hot water-bag had been given to patient, and on taking the temperature, in presence of nurse, the temperature now read at 99 2-5. The hot water-bag no doubt contributed in raising the mercury to the alarming figure of 109 2-5.

The photo shows the distribution of the lesions on the lower abdominal, femoral and outer aspect of the leg.

During the first week in January the last ulcer had healed. From the appearance of the first lesion to the healing of the ulcers has consumed about six months, which will, therefore, represent the course of this marked change.

In a very acid urine red blood cells may be disintegrated and appear under the microscope as an amorphous material. When it is important to determine the presence or absence of blood in the urine it is sometimes necessary, therefore, to resort to a chemical test, *e.g.*, that with guaiac resin.—*American Journal of Surgery.*

MEDICAL THOUGHTS DURING LEISURE HOURS.

BY JAMES S. SPRAGUE, M.D., STIRLING, ONT.

Author of Medical Ethics, Etc.

Those of the profession who take interest in the transactions of the faithful and zealous workers who compose our Council of the College of Physicians and Surgeons have abundant reason to rejoice in the sale of the college building, and will further rejoice in the wise selection of a suitable site in some more classical retreat for the new edifice, where examinations and the work of the Council may not be disturbed by the music of hand-organs and the hum of the traffic of the streets. An ideal college building, in a quiet, yet classical, locality, centrally located, which, too, should satisfy every want and need not cost what we have been left—\$20,000, even \$15,000, it is thought, could be placed aside as a reserve fund.

When the ordinary observer of the movements of men learns that from our Canadian universities of the oldest provinces some four or five hundred young men graduate in medicine who are anxious for desirable places in which to locate, does it not appear to such an observer that if Canada is for Canadians, it is time, if ever, and if we want to keep our own people, that we encourage the efforts of Dr. Roddick and other zealous and truly patriotic M.D.'s, who wish a Dominion licensing organization established. Patriotism and the profession's best interests—now and for the future—demand it, and if ever there is wanted a man or men to come out from the crowd to tell us these truths, such a time is the present time, even now. We await "the loud voice of one crying in the wilderness." It is hoped that this brief and humble reference and appeal may rekindle the zeal for this much-demanded and thoroughly patriotic Dominion Medical Registration.

"Worth many a life is his, the skilful leech,
Who knows with practiced hands to extract the shaft
And healing drugs apply."

If so, had we not better keep such good men at home?

Seated on the Delphic tripod, will not the Sir Oracle of Montreal, who so paternally offers suggestions to presidents and other high officials named for the August meeting at Toronto of the British Medical Association, remind such and other authorities of the necessity of urging forward this great movement, Dominion Registration? Not forgotten, however, is it that this same Montreal sage, some two years ago, lamented the name of the divine Hippocrates being introduced in every introductory address, especially addresses before the Canadian Medical Association. As a student, in fact, as one who for thirty-six years has studied such introductory addresses, I am of the opinion that to leave out the name of this, the brightest name in medicine, would be sacriligious. Equally so, as if in a Sunday sermon the minister would omit the naming of the Incarnate God—the name of our Saviour. No, this immortal, this the master-mind, this the father in medicine, as well as his apostles, whose names and works so brilliantly illumine the past ages, are required to be named, unless we tempt, or wish to tempt, the very gods, and await their vengeance or displeasure. The “Chauvinism,” one of the most masterly addresses of Osler; the address of the distinguished veteran, Dr. Jacobi, a father in medicine, at McGill, in 1905; the address by President Dr. Moorehouse before the Canadian Medical Association at London, in 1903; Dr. John Stewart’s address in 1905, in fact, all such and similar addresses, such as are preserved among men as masterpieces, have named the name of the son of Heraclides, who, of the Esclepiadæ, gave us the “oath,” considered by every *savant* the most masterly piece of condensed literature known and recorded in the world’s history.

The church and the law have, from time immemorial, inculcated the readings of their illustrious dead, and those who read with becoming reverence have through life become inspired, and, as a result, been better men, even crowning lights. With us no such teachings are demanded, in fact, are never suggested. Why? Such can be answered with many words, yet the words, “No time,” “Is not required,” will do. And thus, with the most profound ignorance of the fathers, the history of medicine, its struggles and triumphs, its present and its past

position in the commonwealth, does the young M.D. face the world. My talented friend, Dr. Fischer, although young, illustrates much wisdom, such as should be shown by his elders, in his classical presentation of the works and the lives of our departed master-minds in medicine in the DOMINION MEDICAL MONTHLY.

It is advisable that we have ideals. Such we must have, and Pasteur tells us, "Happy is the man who carries with him a god—an ideal of beauty—and obeys him. An ideal of art, an ideal of science, an ideal of patriotism, an ideal of the virtues of the Gospel." Yes, brother, young or old, have ideals, the finest in conception of mortal minds. Dante has been, and is, the ideal of men who are leaving their names in the hall of fame. Is your name to be enrolled? If so, have an ideal, but do not lose your personality while being absorbed in the copying. The world wants, in fact, is in dire need of, the original character, the Martin Luther who can see our century, that is, the next century, as if it were to-day. Such men have lived, who have lived one century too early. Voltaire is one instance, and if another name be asked, Michael de Montaigne may be added. If the Sir Oracle of Montreal require more, let him demand as one of the principal addresses one whose subject shall be, "Palimpsests of Parasthenics." Such will afford the reader of it ample opportunity to bring in or introduce men of *his* ilk, the incorrigibles, the originators and promulgators of the many patent medicines, so-called eth-pharmaceutical frauds, which so widely are advertised in our so-called honest, ethical medical journals. The author of the paper can easily illustrate that the intramural group of traitors to the best interests and progress of medicine are as numerous as the traitors bearing our titles in medicine to whom extramural may be applied. If Sir Oracle of Montreal were wise he would ask the authorities, or those who have charge of the British Medical Association, to tolerate no cheap or eth-pharmaceutical exhibition of *ols, ins, ines*, in fact, any exhibits of proprietary or other medicinal foods within the walls of the hall where the Association may meet. And, by the way, let us not be so forgetful of our respectability as to be the guest of any such company, and if I mistake not, Sir Oracle, you told us, in 1903, something about this mistaken

step, but you told us so after we had been trapped. We are "easy marks" now, as then. We forget. Why not such names as Geikie, Richardson and R. A. Pyne appear—such a name as Primrose, too; that, too, of Ryerson, when the welcome, the introductory, be presented? Such are names known beyond the seas, and not at home only, but beyond the city's walls.

Did Sir Oracle bid us beware of the professor who, while introducing his pet subject, introduces, or may introduce, the name of a proprietary medicine, whose makers, over the fence, are watching its name mentioned, especially as they have paid the professor in advance, whose merits eclipse the old and endorsed preparations?

If ever there was wanted a *Tilbury Fox*—not a "man from Toronto"—such now is the time to tell us in good, plain English what this cutaneous disease is, this so-called smallpox, for no one, except experts and "the man from Toronto," dreads it, even if the "man in Toronto" so names it and tells us, as do his satellites, that *they know*, even if we, who reside beyond the city walls, as well educated as they and have seen genuine smallpox, *do not know*. Certainly there is a blank page in *Practice* which will be used to describe this disease, which is not smallpox (?) and is not chicken-pox. (?) Will any M.D. be brave enough to throw down the gauntlet and speak, as one having authority, and tell us, without using the *modified*, what it is, for the profession is being censured and injured in many instances, and in as many instances unscrupulous M.D.'s in a few localities, it is said, blow the coals for their own financial interests. Dr. Hodgett's conclusions, without *modified*, are all right.

This morning's mail brought me a gold mine prospectus, coal oil and collection agency announcements, two booklets stamped "For Physicians Only," whose contents named the virtues (if any) of proprietary medicines (quack medicines, as defined by Webster); another pamphlet, with a professor's name, named the virtues of five or six proprietary medicines. Such was not B. P. & Co. No, such come so often as not to attract attention. *The Medical World* has warned me that the gold mine, collection agency, *The Medical Brief*, and

several other similar affairs, need cold storage, or consideration, and therefore I am forewarned. To be brief, I did up in their original covers these several announcements as first named, and mailed them home again, and with this note: "Please do not send to me any more of your circulars. When a boy I was caught by a sharper, and ever since I have been scared." In so doing I feel assured my ordinary tranquillity will not be disturbed, and I have done, brother, what you for many years designed to do, but did not do.

Not medical journals,—"Christian Advocates," or the "Temperance Heralds," but *Collier's Monthly*, is doing the noble work that such journals and periodicals should do in exposing the medical and whiskey frauds which, under the sway of powerful organizations, are quickly making drunkards, violating the regulations of the various liquor acts, promising cures under the endorsement of too many falsified and wrongfully secured testimonials, and are placing shackles on the liberty of the press. Yet such concerns flourish, and silently. We M.D.'s know the deadly and fraudulent work that is being done in our midst by them, and yet no one murmurs, no one among us; in fact, no one among the dear temperance people, having seen the *Collier* denunciations of these gigantic swindles and destroyers of the morals and health of the people, has been aroused sufficiently to give a *résumé* or copy of the swindles exposed by *Collier*, either in medical journal, church paper, or his favorite literary journal, or in his newspaper or his *Physical Culture*. Yet I must place this last paper in the list of the people's champions against the frauds named, but can I or you name in Canada or the United States a city paper, other than *Collier's*—or even a country paper—that has the boldness to expose the frauds under consideration? Is the press shackled? Such has been asserted. If so, does such exist in Canada? We hope not, and do not believe it.

"How shall the press the people's rights maintain,
Unawed by influence and unbribed by gain."

What shall I say in reference to the medical press, here and in the United States? Some years since I had abundant evidence afforded me that not only was one U. S. journal in medi-

cine, but several journals in medicine, published not for honest medicine, but quack compounds, and that the editors of these were muzzled. Oh, what a fall, my faithful brothers, I felt while such a remorseless hand I saw directing the editorials, whose head lines were, "Published solely in, and for the best interests of, the physician"—no doubt it was understood, for the easy marks, of which our profession can boast the possession of many illustrations—enemies of the profession's progress, stumbling blocks to the honest laborer in therapeutics, self-deceived and the deceivers of those whom they term brothers.

In the list of the 2,500 licentiates in our province I am of the opinion that not more than 1,500 are devoting their lives to the practice, in fact, depending on it, and it alone, for a means of livelihood, such being stated and with the belief that investigation can easily verify the assertion. No surprise is occasioned at the indifference so commonly exhibited when great movements are announced for or against our profession's interests. Of these 1,500, probably 500 are thinking of other preferments, in many of which a knowledge of medicine or the M.D. degree is more ornamental than useful; in fact, are working for and zealously clamoring for these golden apples in office, illustrating, too well, the lines of Horace, "At bona pars hominum decepta cupidine falso," or the classical legend of the beautiful Atalanta, who surrendered her virginal purity, while in the race, by seizing the golden apples which Hippomenes threw behind him. The 1,000, not named, are neither for nor against any movement, great or small. As regards professional interests they are the "don't cares," they are not with the workers, yet jealous if not so termed. Other occupations equally claim their time. They are included in the list of those who would probably censure these lines, and otherwise give expression to their loyalty and devotion to medicine by inherent, asinine recalcitration and blatant censures, rivalling the remorseless Zoilus: the malignity of the offspring of Sycorax (Caliban) or the impudence of Autolycus, named in the "Winter's Tale." However small the number is of those who have been true, and will be true, to their first love, and are offering, and will offer, their best libations to the altars of Hippocrates—

to them we may confide the zealous preservation of the keeping in glow the sacred fires, which will assist the workers to make this century glorious, even more glorious than those of the past, which, too, will thus be endorsed as the golden century, when an Osler, a Temple, a Sullivan or a Cameron, this century ending, shall review its triumphs in medicine:

"Though far unworthy of thy train,
With trembling voice I tune my strain
To join with those
Who boldly dare thy cause maintain
In spite of foes."

—Burns.

(To be continued.)

When performing amputation, arthrectomy, osteotomy or similar operations it is wiser to leave the constrictor in place until the dressing is partly, or entirely, applied, than to remove it after tying the large vessels, in an effort to secure the small ones. In the former case the snugly applied dressing will safely prevent hemorrhage; in the latter case, there may be an alarming loss of blood from the numerous small vessels in the very time the efforts are made to tie them all.—*American Journal of Surgery*.

In cases presenting the symptoms of acute epididymitis and orchitis, in which the history and examination fail to show any evidence of gonorrhea, it is always well to consider the possible presence of a torsion of the spermatic cord. The symptoms of the latter condition often resemble those of an acute orchitis, namely, pain, swelling, marked tenderness, and more or less fever. The chief distinguishing points are that in torsion of the cord the pain comes on suddenly after physical exertion, straining, coughing, etc., and is often attended with marked depression and even collapse. The tenderness also appears earlier than in orchitis and is much more intense, while on examination of the cord a very sensitive swelling can be felt.—*International Journal of Surgery*.

THE NEW MANITOBA MEDICAL COLLEGE FORMALLY OPENED.

The new home of the Manitoba Medical College was formally opened on Friday evening, January 26th, and Monday morning lectures began there. It was with feelings of keenest pleasure that those who have taken so active an interest in the construction of this magnificent new building, welcomed their visitors last evening, and it was admitted by all that the building is a credit to the medical faculty and to the West. It is planned to accommodate all applicants for many years to come, and is roomy, bright and cheerful. There was an added cheeriness when the rooms and corridors were crowded with the many guests who presented themselves that evening, and the occasion passed off with great success.

The reception was of a very informal nature, the guests being welcomed by the members of the faculty, among whom were particularly noticed Drs. Chown, Good, Paterson, Popham, Prowse, England, Todd and Bell, and Mr. J. J. Mugan represented the student body. The students were there in force and took a great deal of pleasure in showing the ladies over the building, and probably in recounting some of the gruesome events (largely fictitious) which are considered to be associated with a medical college. A large number of nurses and graduates from the Winnipeg General Hospital, members of the Hospital Aid Society, and other ladies who have been connected with the hospital work were present, together with a number of graduates from the old Medical College.

After the reception, and when refreshments had been served, a couple of the lecture rooms were cleared, and dancing engaged in till midnight. This latter part of the evening's programme was probably the one most enjoyed by the younger element.

HISTORY OF COLLEGE.

This formal opening of the new Medical College marks a distinct advance in a worthy institution, and is an event of no small consequence in the development of higher education

in the West. After some twenty-three years spent in various quarters, more or less suited to the work in which they were engaged, the faculty and students at last find themselves in possession of a building, roomy, complete, well-appointed and thoroughly up-to-date.

Lectures were first given in the olden days in one of the small upper rooms of what is now the Confederation Life Building, a cottage on Logan Avenue being used as a dissecting room. The next year a house on Harriet Street was used as a lecture hall, but its disadvantages were manifest, and it was at this time that the proposers pledged their individual credits to erect the old college in which lectures were given for the last time this week. This building was twice enlarged, but there came a time when a new college became an absolute necessity.

Whatever may have been true of the university in general, it has always been admitted that the Manitoba Medical College, from almost its very beginning, has been maintained in a manner most creditable to the busy men who were connected with its faculty, and to the new province which forms its constituency. It has often been said that the college was born prematurely, before a very distinct need of such an institution had arisen, and as a matter of fact it was organized in defence of a principle, by men who realized that it was coming into the world somewhat before its time. A bill was before the legislature of that day, asking for the incorporation of a private college to be run purely for the purpose of pecuniary gain. To such an institution as this most medical men were strongly opposed, and in lobbying against it, gradually formulated in opposition the plan of a faculty and college representative of the profession in the province. From a faculty of two or three professors and a student body of a half dozen men, the college has grown until the faculty numbers 30, and the students nearly 150.

MANY GRADUATES.

More than three hundred men have been graduated, who may be found practicing their profession with credit, in many cases with distinction, not only in the west, but east, south and over seas. The President of the American Health Association, which represents the profession in Canada, the United States and

Mexico, is a graduate of this college. Half of the medical men of the city are graduates of the home institution.

During the twenty-three years of its existence the Medical College has received practically not one dollar of outside assistance. The costs of building and sites, and of equipment, as well as the current expenses, have been defrayed by the faculty out of fees received, supplemented in more cases than one by contributions from the members of the faculty themselves. Professors have given their services gratuitously. And it is very noteworthy that in spite of the financial considerations which could never be ignored, the ideal of the institution has always been high. Its standard has always compared favorably with that of other Canadian schools. At the present time the Manitoba Medical College is setting the pace for other Canadian medical schools in demanding a five years' course of study. Examination standards have always been stringent, and members of the faculty have frequently, in the university council, proposed that nothing less than graduation in arts be accepted as matriculation.

ITS FACILITIES.

While the college has been crippled in some departments more or less severely by lack of equipment, it has enjoyed compensating advantages in the exceptional facilities the large hospitals here afford to the comparatively small body of students. During the past year or two the expansion of the science faculty of the university has relieved the medical professors of providing instruction in the several subjects which form a basis of medical study.

The present year, in the true sense of that much-abused term, opens a new era for the college. With a reorganized and enlarged faculty, an extended, rearranged and enriched curriculum, and a new college building, it is certainly equipped, as never before, to provide medical training for the West. The burden of suitably equipping the new building has been lightened for the faculty somewhat by the voluntary co-operation of the graduates, who are contributing very handsomely for that purpose.

Of the value to Manitoba of the work done by the Medical College, too much cannot be said. Such a teaching institution in a community, as is well known, has a considerable effect in

keeping up the general average of efficiency in the profession. It provides, as well, a means whereby young men of the West, desirous of entering the medical profession, can secure a thorough training.

While the high efficiency maintained in the past in spite of immense handicaps, has been most creditable to the faculty of the college, it seems scarcely just that a public institution should be allowed to struggle along, however creditably, without public recognition and public assistance. The college is in affiliation with the university, and doubtless will be remembered when some philanthropic individual stands godfather to that somewhat needy institution. —*Winnipeg Free Press*.

After removal of the appendix symptoms of appendicitis sometimes persist, leading the patient to believe that the organ had not been extirpated. These are generally due to a colitis, which must be treated by high irrigations, diet, etc.—*International Journal of Surgery*.

In operating for empyema of the pleural cavity, while the place of incision should correspond to the situation of the pus accumulation, it is well to remember that the point of election is immediately in front of the posterior axillary line and on a level with the nipple.—*International Journal of Surgery*.

In the application of splints for inflammations of the knee-joint it is better to have them too long than too short, in order to secure the necessary immobilization. They should generally extend upward as far as the groin and downward nearly to the ankle.—*International Journal of Surgery*.

From a therapeutic viewpoint it is a great error to class rheumatoid arthritis as rheumatism, since in its treatment the use of tonics, a liberal diet, electricity, and massage are indicated rather than the free administration of the salicylates, which at best only relieve the pain.—*International Journal of Surgery*.

Clinical Department.

Locomotor Ataxia, Following Cholelithiasis, in Which the Gastric Crises Simulated Biliary Colic. PHILIP A. SHEAFF, M.D., of Philadelphia, in *American Medicine*.

The following case history may be of interest to some of the readers of *American Medicine*. It illustrates the importance of carefully working up our cases, and not laying too much stress on statements made by the patient; and teaches a moral regarding the injudicious administration of morphine.

Late one afternoon I was consulted by a man, apparently in great pain; his expression was anxious, and he was vigorously rubbing the epigastric region. He stated he was having an attack of gallstone colic, and that his physician had said to tell whoever attended him to administer .03 gm. ($\frac{1}{2}$ gr.) of morphine at once. He assured me that he had had that amount before and could readily tolerate it. Questioning elicited that he had passed several calculi about nine months before; he had never been jaundiced; and the pains did not radiate to the right shoulder. He had never observed blood in his urine. He seemed in such agony that I accepted his statements and prepared to administer the morphine. He requested me to allow him to inhale a few whiffs of chloroform before using the hypodermic syringe. This I did, and he then asked to go to the closet. Upon his return he stated that he had vomited, and experienced some relief. However, this did not last, for the pain soon became intensified, and he asked me to make a hypodermic injection over the seat of the pain. This seemed so suspicious that I made a hasty examination of his right arm below the elbow, thinking that, perhaps, he was addicted to the use of the needle. This examination proved negative,* and I proceeded to expose the hypochondriac region, noticing as I did so an adhesive plaster over the region of the liver in the right axillary line, and an eczematous eruption over the lower region of the sternum, which he said was due to a roentgen-ray burn. I now administered .02 gm. ($\frac{1}{4}$ gr.) of mor-

*Subsequently, I discovered that the patient was a morphine habitue, who took advantage of the gallstone theory, when coming under the observation of a new physician, in order to obtain morphine.

phine and .6 mg. (1-150 gr.) of atropin sulfate, hypodermically, and relief from the intense agony ensued.

Two days later, at 2.45 a.m., the patient returned, suffering intensely. Under the same treatment previously employed he obtained relief. At this visit I noticed that his left pupil was larger than the right. Later, on the same day, I discovered that the left pupil was considerably larger than the right, and the left upper lid drooped slightly. Neither pupil responded to light stimulation. The knee-jerks were apparently absent. Station and gait were good.

As a result of this superficial examination, I told him I was somewhat doubtful as to his present attacks being due to gall-stones, and set a date for making a thorough examination. The patient did not come at the time specified, but about a week later he made his appearance, suffering from a mild attack. During this seizure he vomited about a teacupful of bile-stained mucus, and also urinated. Examination of the urine showed amount voided, 1½ oz.; color, clear dark amber, but when brought in contact with nitric acid on filter paper a slight violet color, changing to brown, was produced;* acid in reaction; specific gravity, 1.026; no sugar; a heavy ring of albumin was present; urea, .018. After centrifugalization, the microscope revealed the presence of numerous finely granular tube casts. I obtained the following history:

H. R. T., aged 32, white, married; was born in New York, and is a horseman by occupation.

Station: With shoes and stockings on and eyes closed, normal. With shoes and stockings removed and eyes closed, a slight abnormal sway is present.

Gait: With shoes and stockings on and eyes open, normal. With eyes closed feet are separated somewhat and gait is slightly ataxic. With shoes and stockings removed and eyes closed, gait is perceptibly ataxic. Slight inco-ordination is present when touching the tip of the nose, the eyes being closed.

Knee-jerks are absent on both sides, also by Jendrassik's method of reinforcement; tendo-achilles jerk absent on both

*This was suggestive of bile, but later the patient admitted that he was then taking some tablets another physician had prescribed for him in a neighboring city. These tablets, on analysis, proved to be a potassium iodid, thus giving fallacy to the supposed faint reaction for bile.

sides; no spasticity; no ankle-clonus; no Babinski sign or paradoxical flexor reflex present; no paralysis of lower extremities. A pin prick gives rise to pain over both legs and feet, and the sensation is rather promptly experienced, but is not as distinct over the left foot as it is over the right.

The sense of distinguishing heat and cold is at times reversed over both legs and feet, but the reversal of temperature sense is most marked over the inner side of the left calf. The patient has not noticed any weakness of the lower extremities, except during the last few days, during which time he has been doing considerable walking, and has felt somewhat tired. The ground feels solid under his feet, and he has never experienced any difficulty in going up or down stairs. In getting up at night he has never felt as if he would fall.

There is no tremor of the tongue, which is protruded in the median line, and is of normal appearance. There is no tremor of the fingers of the outstretched hands. His memory is good, and pronunciation distinct.

The pupils are unequal, the left one being about twice the size of the right. Neither contract to light, but both respond to accommodation. When the right pupil is exposed quickly to light it dilates slightly. Vision of right eye 15-15, and of the left eye 15-20. Unfortunately an ophthalmoscopic examination was not obtained. There is slight ptosis of the left lid. He has never seen double, and the external ocular muscles are apparently normal. The conjunctives are normal in appearance.

There is apparently no anesthesia of the trunk or arms. Over the lower region of the sternum there is an area the size of the palm of the hand, made up of scar tissue, eczematous in character, with dilated capillaries here and there, said to be the result of a roentgen-ray burn. Examination of heart and lungs negative, with the exception of slight accentuation of the second sound. There is no tenderness over the gallbladder or epigastric region. Examination of abdomen, negative. Appetite is good. He sleeps well. Bowels are regular, except for the last few days, when they have been somewhat loose, and of a golden yellow color. When the desire to urinate becomes manifest, he must perform the act at once. For the last year his sexual power has not been so vigorous as formerly, and after the act is performed he feels exhausted.

General nutrition is fair, although musculature is flabby and not very well developed, and he has lost considerable weight in the last two years. At times there is some edema about the ankles, which is not manifest at present.

Past History.—During childhood he suffered from measles, mumps, and whooping-cough. Denies having had gonorrhea, but he contracted a chancre at 19, for which he was promptly treated, receiving a series of 40 mercurial inunctions, followed by "drops," of which he took 10 three times a day in milk. This medicine was gradually increased until he reached a total of 225 drops daily, when he says pimples would break out on his face and body, and he would suffer from headache. The dose was then reduced and then gradually advanced again. This method of treatment was continued for a period of a year, when he was regarded as practically well. From then on he was in good health up to the age of 29, when he was treated for acute gastritis. After this attack he remained well for a period of four months, when another attack, similar to the first, but of much greater severity in regard to pain, made its appearance, and his physician suspected gallstones. At this time his stools were lighter in color than normal, and in contemplation of operation he was subjected to rontgen-ray examination, but no calculi were found. However, he says that about nine months ago he passed several gallstones, which were recovered from the feces. (This statement has been denied by a member of his family, who said he used the gallstone story to obtain morphine.)

For the last year and a half he has had ptosis of the left lid, but he says it does not droop as much as formerly. This condition was accompanied by dilation of the left pupil.

He had noticed for the last six months that his vision has not been so acute. For the last month he has had, at times, a constricted sensation about the waist.

Family History.—Parents are living and well. He has no brothers or sisters, was married when 21. Within the first year after marriage, his wife had a miscarriage, which occurred about the fourth month. The second pregnancy resulted in a miscarriage at seven months, and followed the first by about one and a half years. His wife is living and well, and they have three healthy children, aged 9, 7½ and 5½, respectively.

Case of Sepsis in a Newly-born Infant. BY A. JACOBI, M.D.,
LL.D., New York, in the *Archives of Pediatrics*.

G., male, 862 Park Avenue, was seen at 9 p.m., April 5, 1905, with Dr. Baran. Is the third child of the family. No miscarriage. First child was an eight months' baby; died on the second day. Mother had been sick and under treatment for several months previously. Second child was delivered by Dr. Baran, and is in good health. No family disease, particularly no hemophilia.

History.—No written records were kept. The following history was elicited from the physician: Nothing was noticed until the fourth day. Then heavy uric acid infarctions were discharged. That lasted until the eighth day. It recommenced on the ninth and lasted to the tenth day. Urine was pale on the eleventh. No examination was made. Quantity fair. Circumcision on the eighth, with no accident. Purpuric spots of small size were seen on the extremities on the ninth day.

Hematuria appeared on the twelfth and continued. On that day a consultant was called in. He found what has been described, and both kidneys swollen. Is reported to have diagnosed tumors of both kidneys.

The cord fell off on the fifteenth day, April 4th. Was seen by me on the sixteenth, April 5th, 9 p.m. Air of the room good; window had been kept open; bedding clean; plumbing appears to be in order. Mother in fair health; sitting up; has no fissures in her nipples. No history of tuberculosis, or syphilis. Baby still weighs nearly six pounds; is said to have lost considerably. Mouth and nose normal; lips dry; somewhat fissured in the corners. Ears appear negative. No diarrhea. No malformation. Purpuric spots, small and large; some with slight elevation of the surface, over chest and epigastrium; some on face, shoulders, arms, fingers. Some painful livid elevations (suggesting the presence of pus in the deeper tissue). Icteric discoloration not noticeable in gaslight; is reported to be trifling. The liver large, as usual at that age. The spleen was not felt; percussion negative. The right kidney was not felt. The left kidney felt like the size of a hen's egg, hard and smooth. Respirations about 60; pulse 200; temperature 104.5 deg. F. Heart negative. Umbilical stump has some bloody oozing; is covered with some boracic acid, with which it has been dressed all along. The condition of the child appeared to warrant no close examination of the lungs, nor of the blood; no vein being in view or accessible under the circumstances. The baby died the next day.

Autopsy at 9 p.m., six hours after death. Surface as described in the living; some of the spots paler; some more livid. A moderate amount of serum, tinged with blood, in the pericardium. On it numerous petechiæ. Heart negative; thymus small, negative. Four of the lobes of the lungs have disseminated hemorrhages; some quite superficial, pleural and subpleural; some infarctions, mostly triangular of $\frac{1}{2}$ to $\frac{2}{3}$ cm. in depth. Some atelectatic places in both sides posteriorly. Peritoneum holds a few ounces of blood-tinged serum, and shows a few petechiæ on the abdominal wall. Both costal pleuræ covered with petechiæ, and a few extensive extravasations. Liver as large as normal; negative. Umbilical vein and ductus Arantii, normal; not ulcerated. Spleen small, negative. Stomach exhibits circumscribed blood points in the mucous membrane. Many extend down to the submucous tissue. These changes are mostly found in the pyloric part.

Umbilical stump large; slightly eroded; covered with a scab of coagulum and boric acid. The pelvic connective tissue is black with blood. Both adrenals small; rather more so than normal.

Left kidney enlarged to almost twice its size; dislodged downwards from 4 to 5 cm.; capsule penetrated with blood; some clots between capsule and kidney; no open blood vessel found; capsule also thickened with fat. The upper part of the kidney forms a black, almost uniform-looking mass, which so swells the tissue that fetal lobulation becomes indistinct. The right kidney is similarly changed, but to a far less degree. Section of the left kidney exhibits some small uric acid infarctions which are still held in the pyramids.

A few points are of unusual interest:

1. Uric acid was discharged in large quantities from the fourth to the eighth day; then again from the ninth to the tenth. Small hemorrhages, with or without secondary nephritis, are not very rare after uric acid infarction, but the suspicion that the foreign bodies might have caused the hematuria was soon dismissed.

2. It is certain that almost every floating kidney found in early age is congenital. As this baby has been lying down all the few days of his life, the increase in size should not be charged to the dislodgment of the left kidney.

3. The diagnosis of intra-abdominal tumors, until it be quite positive, should be suspended even in infants and children in whom intestinal contents are rarely misleading. Besides, what we feel inside is exaggerated by the mass at least of abdominal

wall which has to be grasped on both sides of the questionable body. The left kidney *was* enlarged by hemorrhage, and was abnormally accessible, and the tumor of a kidney might be suggested by the findings. Still, very few tumors of a kidney ever bleed. Carcinoma does bleed sometimes; sarcoma very rarely; calculi in later life; tuberculosis not in the newly-born; cysts and hydronephrosis not at all.

4. The bacteric cause of this sepsis is not known; nor can we know the mode of its invasion. The amniotic liquor and the milk and lochia of the mother should not be accused as long as she was well and other causes cannot be found. The skin exhibited so many changes that its condition one or two weeks previously can only be guessed. The lips were sore at a late date. The umbilical stump was sore and bleeding. The cord had not fallen off before the fourteenth day; invasion is quite possible during that long time of the cutting of the cord (even the very tissue of the cord, unchanged, may admit microbes, or toxins); and boracic acid is probably not a sufficient antiseptic to be applied as a protection to a vulnerable surface like that of the navel.

Do not be too hasty in ascribing the cause of pain in the tendo Achilles, or Achilles bursa, to an illfitting shoe. First exclude gonorrheal infection.—*American Journal of Surgery*.

Attacks of abdominal pain associated only with intestinal symptoms, may nevertheless be due to a renal or urethral calculus, even though, in addition, a tender area may be palpated at a point more or less remote from the kidney regions.—*American Journal of Surgery*.

For a single intravenous infusion, as to combat the shock of hemorrhage, it is not essential that the solution contain any of the blood salts but the most abundant one—sodium chloride. For repeated infusions, however, as sometimes used in treating various toxemias, it is better to employ also the other salts, the solution being made of sodium chloride 0.9, potassium chloride 0.03, calcium chloride 0.02, water 100.—*American Journal of Surgery*.

Therapeutics.

Stypitein. Stypitecin has come to be one of the most valuable agents at our command for the control of hemorrhage. It is efficient in tuberculous hemoptysis, typhoid hemorrhage, menorrhagia, bleeding carcinomata, fibroid tumors, etc.

It is prepared in the form of a yellow powder, readily soluble, the dose being one grain, preferably by hypodermic, which may be repeated.—*Clinical Review.*

Alopecia. According to Walsh he has met with gratifying success with the following* mixture in cases of alopecia:

R.	Acidi salicylici	̄iii
	Acidi carbolici.....	̄i
	Olei ricini.....	̄ii
	Alcoholis, q. s. ad.....	̄vi

M.

Sig.: Apply freely to the scalp once or twice daily.—*Clinical Review.*

Herpes Zoster Treated by Chloride of Ethyl. Howard Morrow (*Journal of Cutaneous Diseases*, April, 1905), in addition to the usual methods of treatment by the application of dessicating powders of starch, oxide of zinc and camphor, or morphine, advises galvanism with weak currents to the affected nerve. Hypodermatic injections of morphine occasionally may be required to relieve the neuralgic pains. He has found, however, that the chloride of ethyl spray directed to the side of the spine, over the points of emergence of the intercostal nerves, affords valuable aid in relieving pain. The relief may continue from several hours to a day or two, and the frequency of its reapplication is regulated accordingly.—*N. Y. M. J. and P. M. J.*

Ointment for Removing Pigmentation of the Skin in Women. Due to Genital Affections.

R. Ol. theobromatis.....	75 grams
Ol. ricini.....	75 grams
Zinci oxidi (C.P.).....	0.30 gram
Hydrargyri oxidi rubri.....	0.15 gram
Essenciæ rosæ.....	gtt. iii

M. Apply with friction, twice daily.

—(*Bulletin general de therapeutique*, October 5th.)

Investigations with Sahli's Test-Meal.

The author's conclusions are:

1. Sahli's test-meal enables us better to understand gastric affections, because it permits estimation of secretion.
2. It enables us to differentiate a hyperchlorhydria from superacidity or secretion.
3. Supersecretion occurs in nervous dyspepsia, symptomatic dyspepsia in obstipation, enteritis, nephrolithiasis, cholelithiasis, teina, etc. It may also accompany a hyperchlorhydria.
4. Hyperchlorhydria occurs in most cases of ulcer of the stomach and chlorosis.
5. The test-meal permits differentiation between atony and supersecretion.
6. Disturbances of motility are more manifest than with Ewald's test-meal.
7. Estimation of fat is more readily accomplished by the modification used by the author and it requires no special apparatus.
8. The acidity figures for free hydrochloric acid are the same, for the total acidity a little less than with Ewald's test-meal (25-30 free HCl, total acidity 40-50).—*Post-Graduate*.

Cosmetic Treatment of the Skin.

Kromayer considers that, since the practitioner has not regarded the cosmetic care of the skin as coming into the scope of his treatment, lay persons and quacks have seized this field; but the whole subject depends on scientific knowledge, and he is

attempting to save it from the stigma of charlatanism (*Die Heilkunde*, September, 1905). The object of the cosmetic care of the skin is to make the skin beautiful and to keep it so. The characteristics of a beautiful skin are: (1) The skin must be smooth, soft, pliable, and of a dull gloss; (2) the color must be a dull white or yellowish-brown; (3) impurities of the skin, such as anomalies of pigments, growths, anomalies of the sebaceous glands, abnormal growth of hair, should be absent. The character of the normal skin, as given under (1), depends on the formation of a normal horny layer of the epidermis. This is normally a thin, transparent, elastic, and very resistant membrane, and contains both water and fat. The character is altered if its water or fat contents are altered, the elasticity and pliability disappears, and, the horny epithelial cells being cast off, the skin assumes a rough, hard texture. In order to retain the normal characteristics of the skin, one should wash as little as possible in water and soap. For the purpose of cleaning, a mixture of fat and water is best, and milk can be taken as a type of such a mixture. Certain fatty seeds yield a similar decoction which can be used—for example, almond oatmeal. Oils and cream or yolk of egg are capable of cleaning dirty skin. Kromayer points out that in order to keep the skin well it should be protected from rough stimuli, but that one must naturally vary the method and rigor of the treatment according to the patient. Dealing with the use of powder, he refuses the idea that this does harm by blocking up the pores, but inasmuch as it produces a layer of material which excludes air and light, the habitual use cannot be recommended. Soft massaging with fat keeps the skin soft and elastic. No drugs should be added to the fat. Dealing with the second point, he points out that the color of the normal skin depends on the transparency of the epidermis and cutis and on the fat contents of the subcutaneous tissue. Since the nature of the subcutaneous tissue must depend on the general body condition, the color of the skin must in some degree depend on a general good health. Red cheeks are produced by exposure to light, air and changes of temperature, but this implies a good skin circulation. Redness elsewhere on the face (nose or forehead) is regarded as abnormal and disfiguring. Here one must distinguish be-

tween hyperemia and venectasis. The former can be dealt with by local applications, such as sulphur preparations (ichthyol, thiol, thiogemin, etc.), while the latter can only be dealt with surgically. The third condition for a normal skin, the absence of the impurities, requires more energetic measures to attain. Of the anomalies of pigment are represented as a type by freckles. Growths which commonly spoil the complexion are pigmented and unpigmented nevi, warts and the like. All these can only be dealt with surgically, either by the knife, scissors, actual cautery or electrolysis. Kromayer has introduced a method of removing these defects without leaving a visible scar. This method is produced by using a rotating cylindrical knife of small size, the exact pattern varying according to the nature of the anomaly of the skin. The same means are of use for anomalies of the sebaceous glands and for superfluous hairs. He deals fully with these rotating knives, which he calls "punches" (*Stansen*). He claims for the method that the small cylindrical piece of skin which is punched out produces so small a defect that there is practically no wound within a few hours of the operation, and that the scar is so small later that it escapes observation. He has previously dealt with the removal of hairs by his epilation "punches" and the treatment of acne elsewhere.—*B. M. Journal.*

The Treatment of Follicular Tonsillitis. A. Sbrocchi (*Clin. Mod.*, No. 33, 1905), after describing the symptoms and course of follicular tonsillitis, considers in great detail the numerous forms of treatment hitherto in general use. He believes that all of them completely fail both in limiting the extension of the disease and in diminishing the sufferings of the patient. Any improvement which follows their use he ascribes to the natural, though not invariable, tendency of the disease to spontaneous cure. As an alternative, he proposes a remedy which has been occasionally mentioned by other writers, but hardly ever with the complete confidence to which its superiority to all other forms of treatment entitles it. This treatment consists in the systematic painting of the tonsil with a 1 in 1,000 solution of perchloride of mercury. At

each sitting each tonsil should three times be painted in turn all over with the solution on a cotton-wool sponge fastened to the end of a penholder. At the first sitting a patient and gentle attempt should be made to remove all secretion from the tonsil both in front and behind, but without wounding the mucous membrane. The soft palate and uvula should also be touched with the solution. The sittings should be repeated at intervals of three or four hours. If the treatment has been thoroughly carried out, with the help of good illumination, depression of the tongue, and appropriate phonation to enable the whole surface to be reached, even a single painting will be followed in the course of a few hours by a decided fall of temperature and a great improvement in the patient's condition, and the morbid process will come to an end after three or four paintings at the outside. No other treatment, internal or external, is necessary or desirable. Where four paintings fail to effect a cure, Sbrocchi considers the fact proof of a diphtheritic infection, and proceeds at once to the injection of antidiphtheritic serum. His corrosive sublimate treatment is entirely ineffectual as against diphtheria, both the more usual form of diphtheria and also that which sometimes simulates a follicular tonsillitis.—*B. M. Journal.*

Surgical Suggestions. Nitrous oxide narcosis can, in most cases, be continued "smoothly," with no cyanosis and with fair degree of relaxation, even for an hour. A laparotomy may be thus performed, if ether and chloroform are contra-indicated. To secure such a narcosis it is best to use an apparatus that permits exhalation into the gas bag, and which has a valve for the admission of air. The bag should not be distended fully. After brief air and gas administration, air is turned off and the patient breathes N_2O and his own CO_2 . At short intervals, and whenever there is any cyanosis, a single breath of pure air is allowed.

During narcosis, when stertorous breathing calls for extension of the jaw, it is well to hold it forward first on one side, then on the other, alternating at short intervals. Long continued pressure at the angle or angles of the jaw produces much soreness.

Often the jaw can be kept forward by catching the lower incisor teeth in front of the upper ones (if they are strong); a single finger on the chin is enough to maintain this position.

A scroll-saw, with an assortment of a dozen saws, can be purchased at the hardware store for twenty-five cents; it is ideal for resection of the small bones of the hand and foot, for amputations of the digits, etc. Well-tempered carpenter's chisels and gouges, and a carpenter's wooden mallet answer the purpose admirably for bone work. A useful bone drill can also be selected from the stock of the hardware dealer. A gardener's pruning-knife and a carpenter's miter saw are the best tools for the removal of plaster dressings. A cheap potato knife, rough sharpened on a stone, is excellent for cutting through starch bandages. Crochet needles are most useful for lifting buried stitches out of a sinus.

Knitting needles find another purpose as a means of rupturing the membranes when this is needed in obstetrical work. Sharp and blunt retractors may be fashioned, in an emergency, by bending the tines of a fork and the handle of a spoon, respectively. A teaspoon is also useful as an elevator of the eye, when resection of the superior maxilla is performed. An inverted tea-strainer is useful in the dressing after colostomy, to prevent pressure of the gauze upon the gut. A spoon-shaped potato cutter may be used, in an emergency, as a wound curette. Similarly, applicators, probes and depressors may be improvised by twisting stout copper wire. The multiple surgical uses of the hairpin are also well-known. Of stouter material, if necessary, a small self-retaining speculum can be quickly made from steel wire; it often obviates the need of an assistant when searching the hand or foot for a foreign body.

Enlargement of the veins at the sides of the abdomen is indicative of obstruction to the flow of blood in the inferior vena cava; distention of veins about the umbilicus suggests obstruction in the portal circulation. The former may be associated with varices of the lower extremities, the latter with hemorrhoids.—*American Journal of Surgery*.

Physician's Library.

Self-Poisoning: Man and His Poisons. A Practical Exposition of the Causes, Symptoms and Treatment of Self-Poisoning. By ALBERT ABRAMS, A.M., M.D. (Heidelberg), F.R.M.S., Consulting Physician, Denver National Hospital for Consumptives, the Mount Zion and the French Hospitals, San Francisco; President of the Emanuel Sisterhood Polyclinic; formerly Professor of Pathology and Director of the Medical Clinic, Cooper Medical College, San Francisco. Illustrated. New York: E. B. Treat & Company.

This is an interesting little volume on a subject now an established fact in medicine. It treats of life, man and his poisons, fatigue, the toxicology of the emotions and sleep, chemistry and physics of thought, the symptoms of self-poisoning, the psychology of living in relation to the prevention and cure of self-poisoning, the treatment of intestinal self-poisoning by the linusoidal current, the mental dyspeptic and the influence of the mind upon the body, and relief for the ideopath. The subject is one of which we know little, so any study of it stimulates further investigation.

Sexual Neurasthenia: Its Hygiene, Causes, Symptoms and Treatment. With a chapter on Diet for the Nervous. By GEORGE M. BEARD, A.M., M.D. Edited, with notes and additions, by A. D. ROCKWELL, A.M., M.D. Sixth edition, with formulas. Price, \$2.00. New York: E. B. Treat & Co.

This must be a popular book with the medical profession, seeing it has now reached its sixth edition. Dr. Rockwell draws from an extended experience, his records dealing with over 1,000 cases of neurasthenia. He directs particular atten-

tion to incontinence of urine in its relation to neurasthenia, and describes a method of treatment which has yielded remarkably good results. The work was originally a posthumous one by Dr. Beard, with whom Dr. Rockwell was associated.

Lectures on Auto-Intoxication in Disease, or Self-Poisoning of the Individual. By CH. BOUCHARD, Professor of Pathology and Therapeutics; Member of the Academy of Medicine, and Physician to the Hospitals, Paris. Translated, with a preface and new chapters added, by THOMAS OLIVER, M.A., M.D., F.R.C.P., Professor of Physiology, University of Durham; Physician to the Royal Infirmary, Newcastle-upon-Tyne; formerly Examiner in Medicine, Royal College of Physicians, London. Second revised edition. Crown octavo, 342 pages, extra cloth. Price, \$2.00, net. F. A. Davis Company, publishers, 1914-16 Cherry Street, Philadelphia.

Dr. Oliver deserves the thanks of the medical profession who only read the English language for having placed this revised translation before us. He records his regrets that Professor Bouchard has not had time to publish a new edition of his work, which certainly would be most acceptable. Whilst retaining the opinions of Dr. Bouchard, Dr. Oliver has brought the book up-to-date in so far as knowledge goes on the subject of auto-intoxication.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

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The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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Dominion Medical Monthly

And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVI.

TORONTO, FEBRUARY, 1906.

No. 2.

COMMENT FROM MONTH TO MONTH.

The physicians and surgeons on the staff of the Toronto General Hospital have approved of the principle of one man, one hospital, except in the case of those known to be special hospitals; and as soon as the new hospital is erected and completed, if not before, the principle will be given practical demonstration. By this, those holding appointments on two or three general hospitals of the city will have to decide to which they shall hereafter owe sole allegiance. It is to be hoped that all other hospitals will fall into line, and the principle affirmed and carried into effect. Once the principle be adopted, it means that hereafter in this city each member of the staff works for the success of that institution to which he is attached or has elected to be attached, where he has a choice to make. This being so, rules and regulations should be framed and adopted in accordance with such ideas, and the entire staff, whether in-door or externe, placed upon a reasonable and equitable footing.

Time has undoubtedly established that the antitoxin treatment of diphtheria is the proper and approved therapeutic method of treating that disease. Opposition to its use has practically vanished. No man of experience or note in the medical profession would now care to deny its efficacy. Here and there, probably, some may consider it not one whit better than the methods formerly employed, and these probably come from the ranks of those who do not see the cases nor the treatment applied from the very first day of the disease. Their deductions come from a study of those cases, often desperate, admitted to infectious diseases hospitals. In fact, so firm has the treatment of diphtheria by antitoxin been implanted in the practice of the medical profession that many employ antitoxin in every suspicious case as a prophylactic precaution, a practice which can be commended, the only drawback to which is appeasing the suspicions of the parents afterwards, as the laity does not keep pace in intelligence with the rapid march of modern medicine. Some very interesting figures have recently been given out for publication by the medical health officer of an English town. Some of these are well worth reproducing here. Prior to the introduction of antitoxin, in 1894, into the hospitals of the Metropolitan Asylums Board, the mortality in those hospitals was 37.3 per cent. (1888-1893). Then antitoxin was introduced. From 1894 to 1904 the mortality was 15.8 per cent. It is specially worthy of record that in the Brook institution, in the cases treated with antitoxin on the first day of the disease, for six years from 1897-1902, there was not a single death. In view of the fact that the returns in Ontario for December, 1905, show 28 deaths in 231 reported cases, the importance of bearing this single item in mind is here presented to be emphasized.

That the winter of 1905-6 is the most remarkable, from a temperature standpoint, within the ken of the oldest inhabitant, will scarcely be gainsaid by that individual. Its openness causes many a query to be presented to the doctor: Doesn't this weather make a lot of sickness? It is the universal and prevailing idea of most people that mild weather in winter-

time is provocative of business for the doctor. As the doctor knows, the very reverse is the case. Mild weather in winter-time brings people out of doors and into fresh air, and though the temperature causes relaxation and deprives the body of tone, the out-door life counteracts the effects and predominates the disabilities. A cold winter, though tonic, drives people in-doors, hence the respiratory and catarrhal diseases abound. Modern therapeutics is for lots of air, fresh air and cold air, and is altogether opposed to coddling. An air that is stagnant, dust-laden, vitiated by smoke and noisome gases, or damp, causes trouble. There are some few who maybe cannot stand the irritation of cold, fresh air to their rhinal, laryngeal, tracheal, and bronchial mucous surfaces; but the great majority can, and should be taught that in their case the wind should not be tempered to the shorn lamb.

Clergymen as risks in life insurance are considered gilt-edged business for life companies. Lawyers, while not so good, are infinitely much better than doctors. The mortality in the three learned professions has been set down by Ogle numerically as follows: Clergymen, 106; lawyers, 152; doctors, 202. The cause of a higher mortality in lawyers than in clergymen may be attributed to greater mental energy and strain—worry. Doctors are said to be amongst the very worst classes of risks. The fact that mortality amongst the medical profession is so high is due, no doubt, to their necessarily irregular mode of life. Disturbed nights, loss of sleep, worry, irregular meals, mental anxiety over cases and reputation may be set down as causes. Then there is that most harassing and soul-wracking feature of medical life, constant expectancy to call to duty. There is no real nightly relaxation, no real Sunday relaxation. Of late doctors have appreciated this fact, and have realized more than ever before that they must have, like every one else, a weekly relaxation, if not a nightly one, and have so consequently made arrangements amongst themselves to take turns in being on duty on Sundays. Such is the case in some Old Country places, and there would seem to be a special reason why some such

arrangement should be introduced into the medical life of our cities and towns. Six or eight physicians could form an alliance of this character, so that one of their number could attend to all of their Sunday work on a certain Sunday, whilst the others took a required rest, or went to church. The same arrangement could be made for holidays, if required. The medical man needs a regular rest and complete relaxation weekly, and the Scriptures never precluded him from it.

Some time ago the ratepayers of Toronto voted \$50,000 for the purposes of a municipal consumption sanatorium. The first year's interest on this amount was handed over to the National Sanitarium Association, and now that body asks for the entire sum. The new chairman of the Toronto Board of Health, a medical man of some force and resource, brings down his initial gavel, however, with decided approval for the Toronto Municipal Consumption Hospital. No doubt it would be all right to add another building to the city's possessions beyond the Don, but at the present time is there any urgent, pronounced and crying need for it? The medical officer says make haste slowly in this direction, and Toronto has a decided inclination to rely much upon this official's advice. With all the general hospitals doing what they can to combat tuberculosis, with the Toronto Free Consumption Hospital at Weston for advanced cases, and that at Muskoka, there seems to be little to be said against complying with the requests of the N. S. A.; but probably, as the ratepayers authorized the payment of this amount for a specific hospital, they should be considered to allow of their money going in another direction. We would favor this special grant to the N. S. A. for their institution at Weston alone.

News Items.

BRANDON, Man., General Hospital has accommodation for 120 patients.

DR. CHARLIE MURRAY, Toronto, has gone to Europe.

TUBERCULOSIS claimed 172 victims in Ontario in December, 1905.

THE subscriptions to the Toronto General Hospital now total over \$1,100,000.

DR. E. C. BENSON is chief of the intern staff at the Toronto General Hospital.

DR. H. MASON has resigned as Medical Health Officer of Toronto Junction.

DR. G. R. McDONAGH, Toronto, is spending two months in Southern California.

THERE is an outbreak of typhoid fever at Sault Ste. Marie and Fort William, Ontario.

THE question of moving the Toronto Provincial Hospital for the Insane is being revived.

THE New Medical College was formally opened at Winnipeg on the evening of the 26th of January.

DURING the last half of 1905 there were 1,096 births in Winnipeg, 1,064 deaths, and 835 marriages.

DR. R. R. HOPKINS, formerly of Grand Valley, Ont., but now of Toronto Junction, has recently been appointed Medical Health Officer of that town.

THERE were 127 cases of smallpox in Ontario in 20 municipalities in December, 1905. No deaths.

IN December, 1905, 735 divisions in Ontario, representing a population of 1,959,700, reported 2,116 deaths.

THE deaths from typhoid fever in Ontario in December, 1905, numbered 45, out of 152 reported cases.

DR. ROBERTS, of Simcoe, formerly of Langtan, has been appointed a coroner for the county of Norfolk.

DR. SISLEY, of Agincourt, Ont., has been in New York for about two months, taking a special course in surgery.

DURING the twelve years of its existence the Royal Victoria Hospital, Montreal, treated 29,682 patients in its wards.

DR. G. A. CHARLTON, Regina, has been appointed Bacteriologist to the Saskatchewan Department of Agriculture.

THE Royal Columbia Hospital, Victoria, B.C., will probably soon be converted into a more modern structure at a cost of \$45,000.

DR. ANDREW MACPHAIL, pathologist to the Montreal Western Hospital, and Dr. J. Leslie Foley, dermatologist, have resigned.

THE number of contagious diseases in Montreal during the week ending January 20th, was 69. There were 22 cases of typhoid fever.

AN epidemic of smallpox exists in the village of St. Cyrille, near Drummondville, P.Q. One hundred and fifty cases have been reported.

THE Women's Auxiliary in connection with the Winnipeg General Hospital collected, during 1905, \$3,700 for the benefit of the hospital.

DR. F. G. FINLEY, Montreal, recently read a paper on "The Relation of Occupation to Life Insurance" before the Insurance Institute of that city.

ON the 12th of January there were 325 patients in the Toronto General Hospital, the largest number on record, 195 males and 130 females.

DR. GRACE RITCHIE ENGLAND, Montreal, has resigned as assistant Gynecologist to the Montreal Western Hospital, after a service of thirteen years.

DR. MCINTYRE, of Glencoe, has purchased the practice of Dr. Allin, Petrolia. Dr. Allin leaves for Chicago, where he will take post-graduate courses.

PETERBOROUGH, ONT., according to Medical Health Officer Dr. Bingham, recorded 224 deaths in 1905, 23 less than in 1904, the population being 14,500.

DR. O'GORMAN, of Depot Harbor, has been appointed Physician for the Grand Trunk Railway Company, and will have his headquarters at Depot Harbor.

DURING the week ending January 13th, the Winnipeg General Hospital treated 381 patients, 220 being men, 111 women, and 50 children; 93 out-patients.

DR. JOHN NOBLE, Toronto, the new Chairman of the local Board of Health, is in favor of the city using the \$50,000 voted a year ago for a consumption sanatorium.

THE Toronto General Hospital, St. Michael's, the Western, and Grace, are, according to Toronto's Medical Health Officer, doing a good work among consumptives.

THE Dominion health authorities, owing to the absence of smallpox in any of the States bordering on the Canadian frontier, have withdrawn all inspectors at ports of entry.

DRS. C. C. GURD, L. Gilday and A. G. Nichols have been appointed to the Montreal Western Hospital, the two former as assistant gynecologists, the latter as pathologist.

A CITIZENS' committee, organized in Toronto to canvass leading business firms and prominent citizens in aid of the Toronto General Hospital, is receiving some handsome subscriptions.

THE Montreal General Hospital admitted 3,210 patients to its wards in 1905, while in the out-door departments the consultations numbered 44,377, nearly 5,000 more than in 1904.

DR. ROGER, of Fergus, has sold his residence and practice, and will move to Asheville, North Carolina, where he accepts the position of medical superintendent of the Industrial School for Boys.

DR. F. MONTIZAMBERT, Director-General of Public Health, in his annual report to Parliament, will again strongly emphasize the need of a separate Department of Public Health for the Dominion of Canada.

MESSRS. R. RAIKES, M.D., of Midland; W. E. Storey, M.D., of Walkerville, and James Galloway, M.D., Beaverton, have been appointed associate coroners for the counties of Simcoe, Essex and Ontario, respectively.

THE Board of Health of Galt, Ontario, will apply to the Ontario Government for aid to maintain a cottage hospital in that town for incurable consumptives. This will be the first institution of its kind established by a Canadian municipality.

LONDON, ONT., recently sent a deputation to Toronto to interview the Ontario Government with regard to a grant towards a School for Hygiene in that city. From \$75,000 to \$100,000 was asked. Amongst the London doctors in the deputation were Drs. W. H. Moorhouse, H. A. McCallum, Graham, McArthur, Waugh, English, W. J. Stevenson, Roome, Drake, John D. Wilson and Cl. T. Campbell.

THE Out-Door Departments at the Royal Victoria Hospital, Montreal, treated 3,830 patients, who required 24,872 visits. Of this number 8,587 were medical visits; 4,988 surgical; 4,524 eye and ear; 5,633 nose and throat; diseases of women, 1,140.

THE following doctors have been appointed to the "extern" medical staff at the Toronto General Hospital: Drs. C. M. Murray, R. M. Turner, A. J. Gilchrist and W. Burgess. Miss Sarah H. Gladstone, who has had charge of the pavilion for the past six years, has resigned.

THE Western Hospital, Montreal, has decided to erect a new wing, to accommodate 100 additional patients, at a cost of \$50,000. During 1905 this hospital cared for 524 patients, whilst in the out-door departments there were 6,698 consultations. The total receipts amounted to \$21,405.58.

DR. FRANK IRVIN, formerly of Brandon, Man., who has been practicing at Souris for the past few months, has been appointed assistant medical superintendent of the Brandon Asylum. Dr. Norquay, who now holds the position, will be transferred to Selkirk as medical assistant to Dr. Young.

DR. JAMES S. SPRAGUE, of Stirling, author of "Medical Ethics," etc., an examiner for the Medical Council, has nearly finished the MSS. for his work, entitled, "Ideals in Medicine." This work is dedicated to Osler, who offers his name as the honored patron to a writer so zealous and deservedly popular.

THE Christian Science case in Toronto, known as the "Goodfellow" case, has closed. Those attending Mr. Goodfellow, who died of typhoid fever, have had their conviction quashed by the Court of Appeal, the judges holding that the charge of "conspiracy" was general, and not conforming to any indictable offence.

THE total receipts of the Royal Victoria Hospital, Montreal, in 1905, were \$160,591, while the ordinary expenditure amounted to \$124,547. The total cost per patient per day was \$1.74; the

cost per day of maintaining each person in the hospital—staff, servants, all employees and patients—being 93 cents, and the daily cost of provisions for each person, 23 cents.

DR. UNDERHILL, the Medical Health Officer of Vancouver, B.C., gives the following figures for infectious diseases in that city in 1905: Mumps, 188; skin diseases, 4; diphtheria, 26; measles, 26; whooping cough, 99; tuberculosis, 7; typhoid fever, 52; scarlet fever, 52; chicken pox, 76. He gives the death rate for the year as 10.571 per cent. in a population of 42,000.

THE Royal Victoria Hospital, Montreal, treated, in 1905, 3,093 patients in the wards. On January 1st, 1905, there were 174 patients in residence. During the year 3,083 were discharged, of whom 1,348 were well, 1,098 improved, 184 not improved, 278 not treated, and 182 died, giving a death-rate of 5.89 per cent.; or if those dying within forty-eight hours of admission were omitted, the death-rate would be 4.05 per cent.

THE new Asylum for Epileptics at Woodstock was taken over from the contractor by the Provincial Secretary's Department. It consists of an administration building and two cottages, with accommodation for seventy patients. Dr. J. J. Williams, of Lisle, is the superintendent. Asylum Inspector E. R. Rogers and Provincial Architect S. R. Heakes, will inspect the institution next week before certifying to its fitness for occupancy. No date has yet been fixed for the formal opening.

THE sixth annual meeting of the Canadian Association for the Prevention of Consumption and Other Forms of Tuberculosis will be held in the Railway Committee Room of the House of Commons on the 28th of March next. The Hon. Senator Edwards will preside in the afternoon. In the evening a public lecture will be delivered in the lecture hall of the Normal School by Dr. Arthur J. Richer, of Montreal, which will be illustrated with stereopticon plates, showing the stages of consumption and some of the appliances now in use to check and cure the disease. The chair will be taken in the evening by His Excellency Earl Grey.

IN the Leper Lazaretto at Tracadie, N.B., in 1905 there were seventeen names on the books of the institution, ten men and seven women; but fifteen were inmates. Two new patients, both from neighboring districts, were admitted in 1905, and one was discharged as cured, but ordered to report from time to time for inspection by the physician-in-charge. The treatment followed at this institution consists of the administration of chaulmorgra oil and strychnine, and creolin externally. All the patients taking it are improving both in health and in spirits, and the results continue good.

THERE is no law at present on the Canadian statute books authorizing the Department of Inland Revenue to take any proceedings against the manufacturers of patent medicines, who make use of harmful ingredients in making up their medicines, but this condition of affairs may be remedied before long. Pressure is being brought to bear upon the Government to take action to protect the public in this respect, and the matter is now receiving the attention of the officials of the department. As a preliminary the department will, in the course of a short time, publish the results of an analysis which has been made of several of the best known patent medicines. Future action will depend largely upon what this analysis reveals.

DR. J. W. STIRLING has been appointed ophthalmologist to the Royal Victoria Hospital, Montreal, in succession to the late Dr. Duller. The following appointments have been made to the medical staff: Associate in Medicine, Drs. Fry, Cushing and McCrae; Clinical Assistants in Medicine, Drs. Burnett, McAuley and Russell; Clinical Assistants in Neurology, Drs. Robertson, Robins and Russell; Clinical Assistant in Ophthalmology, Dr. Tooke; Clinical Assistant in Gynecology, Dr. Goodall; Clinical Assistant in Laryngology, Dr. Hamilton White; Registrar, Dr. Cushing; Assistant Registrar, Dr. McAuley; House Pathologist, Dr. Klotig; Assistant in X-Ray Department, Dr. Cram.

Obituaries.

Dr. Silas P. Emes died recently at Niagara Falls, Ont., of diabetes. Several years ago, during the boom time in Winnipeg, he lived in that city.

Dr. Walter Hurt, of Belmont, Man., died at the General Hospital, Winnipeg, on the 16th of January, 1906. Deceased was thirty years of age.

William Armstrong, M.D., aged 79 years, died at 13 Fenning Street, Toronto, on the 11th of January. He became a member of the College of Physicians and Surgeons of Ontario in 1869.

Dr. Wm. John Early, Owen Sound, Ont., died at that place on the 25th of January, 1906. Deceased, who was a member of the College of Physicians and Surgeons of Ontario since 1889, had practiced in Owen Sound since 1893.

Dr. John F. Brine, Canso, N.S., medical officer for the Commercial Cable Co. at Hazel Hill, N.S., died on the 18th of January, 1906. Deceased was a graduate of Harvard University of the class of 1868, Sir F. Borden and Dr. Roddick being classmates.

Dr. Milton Baker, Brantford, Ont., died at the John H. Stratford Hospital of that place on the morning of January 23rd, aged 38 years. The cause of death was otitis media and meningitis. Deceased was graduated from Trinity Medical College and Trinity University, Toronto, in 1894, and commenced practice at Springfield, Ont., where he remained up to moving to Brantford two years ago. His wife, who was a niece of Mr. J. S. Fullerton, City Solicitor, Toronto, pre-deceased him two years. The late Dr. Baker was an honest, genuine man, and deserved more of life than thirty-eight years. He was a good, all-round practitioner.

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVI.

TORONTO, MARCH, 1906.

No. 3.

Original Articles.

THE PRODROMATA OF INSANITY.

By W. H. HATTIE, M.D.,

Medical Superintendent Nova Scotia Hospital.

Some years ago a paper, bearing a title very similar to that upon which I now venture, was presented before the Harveian Society of London by one of England's most eminent alienists. The subject was dealt with comprehensively, and so great a variety of symptoms prodromal of mental disease were presented, that, it is said, every one who heard the paper went away in a great state of perturbation; every one discovered that he possessed, on his own account, some of the symptoms indicative of oncoming insanity. In the face of such an experience by one whose fame is for all time established amongst those who favor psychiatry, it surely requires courage as well as presumption in me to come before you with a paper on the prodromata of mental disease.

Lest you fear that you may, like those of the Harveian Society, be stimulated to an unpleasant degree of introspectiveness as my paper proceeds, a disclaimer of evil intent at the outset may be reassuring. There is to be no attempt at exhaustiveness in this paper. It will not venture even a superficial glance at the whole psychiatric field, but will deal only

with the more common forms of mental derangement—those with which the general practitioner is more or less intimately acquainted. And because it is presented by one whose work is done in a hospital for the insane, it must not be regarded as authoritative, for the asylum physician has little opportunity of learning about the earlier manifestations of insanity which necessarily come under the observation of the general practitioner. As a matter of fact, we of the psychiatric specialty, after a long period of observance of our medical brethren who exploit other lines, have concluded that it is time that we too assumed the convenient expedient of poking the responsibility for our ignorance upon some other branch of the profession, and the special reason for bringing my paper into being is to secure an opportunity to call the attention of the family doctor to the splendid opportunity he has of contributing towards our enlightenment by thorough study of early symptoms and careful estimate of their relative importance. The majority of patients coming to institutions for the insane are incapable of giving a reliable account of the development of their disorders, and the asylum physicians must necessarily depend almost entirely upon the histories which accompany patients. The meagreness of such histories frequently bears testimony, of the silent yet eloquent sort, to lack of interest in mental cases on the part of many physicians in general practice. Yet it is generally conceded that no other illness compares in fatefulness with mental disease; there is none which causes greater distress to friends; none more dreaded, or from which recovery is more devoutly wished for, and none which more intimately touches individual family and nation, or which is of greater import from sociologic or economic viewpoints.

When, with these facts, we have also to consider that insanity is rapidly increasing in civilized countries, and that it is a condition which is often arrested in its incipency, we have surely a sufficient combination of reasons why the general practitioner should regard mental disease as of no less importance than other conditions which he is called upon to treat, and should lead him to a careful study of mental abnormalities.

It is rather a peculiar circumstance that the majority of physicians are especially interested in the one form of mental disease, from which there can be no recovery—general paresis. It is very desirable that an early diagnosis should be made in this disease, because of the fact that it often manifests itself in a profligacy which may bring financial ruin to patient and

family, or in a moral lapse which may lead to unfortunate legal complications, and cause great mortification to friends. Physical symptoms, especially pupillary phenomena, tremor of lips and tongue, exaggeration of knee jerk, and some blunting of cutaneous sensibility, are commonly to be determined very early in the disease, and are of such diagnostic importance that they should always be looked for in an individual approaching the age of thirty-five or forty, whose general behavior has undergone notable change.

It is not generally recognized that the type of general paralysis has undergone considerable variation of late, and that the mental manifestations are often those of nervous exhaustion, rather than the expansiveness and grandiosity which have colored the classical picture of the disease. Frequently there are early complaints of disordered digestion, lack of energy, disturbed sleep, difficulty in concentrating thought, failure in memory, and uneasy sensations in the head, which are told with such an air of concern, and with such minuteness of detail, as to convince the physician that he has a case of neurasthenia to deal with, and should a careful physical examination be omitted the real condition may be quite overlooked. The danger of this error is increased because of the fact that general paralysis is very prone to occur just at the "neurasthenic age." In some instances the earlier stages of general paralysis are characterized by mental depression, and one might at first think he had melancholia to deal with. The physical symptoms are really the only constant ones in the disease, and they should always be looked for in the first examination of any mental patient. There is, perhaps, no form of alienation in which it is more desirable to have the patient committed to an appropriate institution at the earliest possible moment. Certain it is that if we are ever to escape from the unvaried fatality with which the disease has thus far confronted us, we must diagnose at the very beginning, and institute treatment at once.

Several recent writers have attempted to trace a close analogy between general paralysis, and a condition which is especially apt to appear during the years of adolescence—the dementia praecox of Kraepelin's conception. The term dementia praecox is not ideal, but so large a company of authors have heaped their criticisms upon it that there appears to be no further need for abusing it, and so it is accepted for the purposes of this paper. The condition is one which, in its earlier stages, may present itself in at least two, and possibly in

three forms, but it is generally characterized throughout its course by a peculiar suspension of emotional activity, and nearly always ends in a state of profound apathy and indifference, rendering the patient quite unfit for anything but institutional life. It is a very common form of mental disorder, including a considerable majority of all cases occurring under twenty-five years of age, and offers an extremely unfavorable prognosis. It seems, moreover, to have been rapidly increasing in frequency of late years. For these reasons, and also because it contributes the greater proportion of the demented to the population of our asylums, it is a variety of mental disease which should receive most earnest consideration.

Just as blunting of the moral sense may be one of the first signs of general paralysis, so the development of bad habits may be prodromal of dementia praecox. A reasonless depression is also an early symptom in a fair proportion of cases. Lack of attentiveness, frequently recurring dreamy states, and especially failure to show natural affection for and interest in parents and friends, are very suggestive symptoms. A state of depression accompanied at the very onset by vivid hallucinations or confused delusions generally indicates dementia praecox. A tendency to silly laughter and grimacing, flightiness and weakness of judgment are all more or less indicative of this disease. It is not until the condition has become very advanced that failure in comprehension or impairment of memory become noticeable.

Kraepelin limits the use of the term melancholia to cases showing a rather characteristic depression, and which generally appear in the involutional period—either coincident with or following upon the climacteric. Apprehension and depression are constant features, but delusions need not be present, and there may in fact be no intellectual defect until the condition has lasted for a long time. Such patients often suicide in spite of the absence of delusions; a fact which is attested to by a long list of self-ended lives. The early recognition of the disorder is consequently of great importance. Amongst the symptoms which first become manifest, certain sensory symptoms deserve consideration. One of these is headache, or perhaps more correctly a peculiar distressing sensation, which is usually persistent and not relieved by sleep, which is often accompanied by variously described paresthetic sensations, and sometimes by vaso-motor disturbances, and which has often associated with it a feeling of weariness and incapacity, and an indefinable fear. Insomnia is another early symptom, which,

while by no means limited to melancholia, is especially important in connection with this disease. It should always receive most careful attention. Loss of muscular tone, with a feeling of weakness and a flabby state of the muscles, class amongst the prodromal symptoms of melancholia and constipation—frequently of a most obstinate type—is extremely common. Digestive disturbances with consequent nutritional defect and loss of weight often coexist. The mental symptoms appear gradually as a rule, and slowly increase in intensity. Some emotional depression may be noted early, but memory remains good for a long period, and the patient is frequently able to talk intelligently, and usually without manifest effort during this time.

In the forms of insanity which tend to recur, there is offered an especially good opportunity for studying the early symptoms. The recurrent manias and the recurrent melancholias of the older writers have, with certain other psychoses, been grouped by Kraepelin under the term manic—depressive insanity. The applicability of this term becomes apparent to anyone who has had an opportunity of studying several attacks of mental disease in a single individual, for it is found that each attack presents features of its own, that some are especially characterized by exaltation, others by depression, while still others show an admixture of exaltation and depression, and yet, as far as can be determined, the pathologic condition is the same in each instance. The symptoms premonitory of either phase of this psychosis may be divided into objective and subjective. Among the objective symptoms which often indicate the advent of a maniacal attack may be cited unusual alertness, quickened muscular reaction, especially indicated in unusually rapid play of the muscles of facial expression and of gesturing, a tendency to over-activity, and often an improvement in the general “set-up” of the individual. There are sometimes attacks of muscular twitching, sometimes tremor, especially when finer movements such as those of writing, are attempted, and very often an unusual degree of loquacity. Subjective symptoms of an approaching manic attack include a feeling of unusual well-being, a desire to be occupied, widened and increased interest in the affairs of life, and apparently lessened need for food and sleep. These symptoms may be present for some time without there being any noticeable flaw in mental action; in fact, the period may be one characterized by exceptionally good mental work. But if they are abnormal to the individual, and especially if there be predisposition to mental disease, because of heredity

or a previous attack, they are strongly presumptive of oncoming excitement.

While, in a general way, objective symptoms predominate before an attack of excitement, subjective—or, in other words, sensory—symptoms are most prominent in antecedence of depressed states of mind. A series of symptoms may precede the depressed phase of manic-depressive insanity, which correspond very closely with those which have been described as premonitory of melancholia. Comparative youth, a bad inheritance, and especially the history of a previous attack of mental trouble, point to the depressed phase rather than to melancholia, and an early appearance of indecision and loss of capacity for effort add to the likelihood that an attack of the depressed phase of manic-depressive insanity is impending.

Many attacks of mental trouble have their incidence in an attack of acute bodily illness. The various febrile psychoses, and some of the cases of collapse, delirium, etc., are especially to be thought of in this connection, but an attack of manic-depressive insanity, melancholia, or dementia praecox, may be determined in this way. The infectious diseases are most likely to be followed by mental disorder, and typhoid seems to be particularly apt to leave behind it a mental warp. Sometimes the mental symptoms so obscure the clinical picture that the underlying general disease may be overlooked. Psychical enfeeblement in the spheres of comprehension, thought, memory, emotion, and action, suggest a coexisting physical condition, making its damaging influence felt in all these directions, and it is especially associated with an acute infection that such mental symptoms are found. Occasionally mental symptoms may really antedate other symptoms of an acute febrile process.

My paper is intended to be suggestive. Enough has been outlined to show that, even with our present knowledge, the watchful family doctor may often be able to detect mental disorder in its incipiency—when the greatest likelihood exists of improvement under treatment. Of course, in estimating the importance of prodromal symptoms, one should give full value to the natural temperament of the individual. In a predisposed individual, such symptoms as have been noted may be of the most serious import, while in one whose family history and personal past are good, they may mean but little. It may at times be very difficult to determine when one has to deal with prodromata, and when with an actual attack. Much observation will be necessary before our knowledge will have attained anything like a satisfactory degree of accuracy.

HERNIA OF THE BLADDER.

BY R. B. NEVITT, M.D., TORONTO.

Albucasis in the twelfth century, Sala in the thirteenth, Guy de Chaulliac in the fourteenth, have mentioned cases, and Verdier in 1769 wrote a classic upon the subject. It was, however, regarded as a rarity. The modern text-books have short references, and utter warnings to which I confess I have been oblivious, until the following case occurred to me, whereupon I proceeded to re-peruse my books with more attention.

Hernia of the bladder is, perhaps, not more frequent now than in the earlier years of surgery. The old operation of herniotomy afforded so limited a view of the parts that unless the bladder was wounded the diagnosis was not made. The modern operation permits such a full view of the structures and allows us the opportunity of minutely examining the parts presented to us that we can frequently discover the viscus when present; and consequently it has been stated that the bladder is present in about 1 per cent. of inguinal herniæ.

Hanington, quoting Brunner's figures, gives 181 cases: 138 inguinal, 29 femoral, 14 other varieties.

Macready gives 92 inguinal and 8 femoral.

Curtis, in 55 cases: Inguinal, 45; femoral, 10.

It occurs with greater frequency upon the right side; in a very few cases it was found upon both.

The amount of bladder contained in the sac is generally small, about the size of an English walnut. The cases are recorded in which the herniated portion contained many ounces of urine.

The prolapsus may be: Intra-peritoneal, extra-peritoneal, para-peritoneal.

The latter is the most frequent form. Lottheisen states that most of the cases are said to be extra-peritoneal, but closer investigation, he says, will probably show them to be of the combined type.

The bladder alone may be present, or it may be accompanied by bowel, and the bowel in this case will be in front and the bladder behind it.

The average age at which it occurs is 51 years, and generally in old herniæ.

Anything that causes an increase of the intra-abdominal pressure acts as a cause; hence pregnancy, constipation, obstructive disease, enlargement of the prostate stricture of the urethra, cystitis, calculus vesicæ, etc.

It is difficult to conceive that the normal globular, muscular viscus, can find its way into and through the narrow and distant hernial orifices. Hence it is not without reason that it is found so frequently in those cases in which the bladder is liable to be altered, whether by the flaccidity of age or the dilatation incident to obstructive disease.

Lipome herniaire or lipocèle, a development of the perivesical fat, is said to precede and direct the bladder in its descent into the hernial orifices. This lipocèle has given occasion to much controversial discussion. It has been described as differing in color and consistence from other fat, and with having peculiar adhesions to the bladder, whether or not we allow to this lipocèle the etiological importance attributed to it by some authors. There can be no question that during an operation the presence of an unusual quantity or quality of fat should put the surgeon on his guard, and if this fat has a thin membranous covering or sac of its own, and when this is open the fat is found attached by septa to the parts beneath and to the sac, and does not shell out easily. This double attachment should make the surgeon suspicious.

Lottheisen says, if a tongue-shaped mass of fat, with its base towards the epigastric vessels is seen internal to and below the sac one would be suspicious.

Becker says adipose tissue at inner side of the sac awakens suspicion. Ostermeyer gives his opinion that lipocèle is rarely absent; behind the sac a peculiar fatty mass of lemon tint, differing from the rest of the paler fat. It is also enveloped in a thin transparent membrane and the lipoma is firmly adherent to the sac.

It has been frequently observed in herniæ that have been operated upon and that have recurred. The shortening of the peritoneum and the adhesions that have occurred serve to drag the bladder downwards.

The diagnosis is rarely made early. There are vague symptoms which, if noted, may suggest its presence, such as difficulties in urination, passing attacks of retention and vesical tenesmus; these attacks being relieved by assuming peculiar positions to urinate; pressure over the tumor, or by altering its level, facilitating the passage of urine. The increase in size of

the tumor as retention comes on, its decrease as urine passes. *Miction en deux temps*—divided micturition—the bladder empties itself, and after a short interval the herniated portion of the bladder is emptied. The urine itself shows no changes unless complicated with calculus, or by cystitis. If strangulation occurs the signs of bowel obstruction are less intense and are associated with uremic signs, or vesical tenesmus. The tumor is, as a rule, irreducible, or if so, a part is left behind thick and doughy to the feel, dull on percussion and not translucent.

If, after emptying the tumor, the bladder is filled with an injection, the tumor fills also. The point of a sound, introduced per urethram, may be made to engage in the inguinal or scrotal tumor. Pressure over the hernia gives rise to a desire to urinate; if the pressure is continued this becomes uncontrollable.

By rectal examination the normal bulging of a distended bladder towards the sacrum is absent.

The condition most likely to be confounded with it is hydrocele. But in this case the fluid is irreducible, and the tumor is translucent. In hernia of the bladder the fluid is reducible—the tumor is opaque, and pressure on it gives rise to desire to urinate.

With hydrocele of a hernial sac, if the fluid is reduced there are no urinary symptoms, and there is no massive thickening of the posterior and inner part.

As a rule the diagnosis is made, first, during the course of an operation, and then most often after incision into the viscus. As stated above, the presence of an unusual quantity or quality of fat, its unusual attachments, and its position at the back of the sac should make the surgeon very circumspect.

The appearance of the bladder itself is very deceptive. The walls may be so thin and attenuated that muscular structure is utterly unrecognizable. The wall may be thin and transparent like the ordinary sac of a hernia. Any unusual thickening of the inner and upper part of a hernia sac should be treated with respect the most profound.

If the suspicions of the surgeon have been aroused by the abundance and peculiarity of the fat, by the presence of muscular fibres, or by the relations of the sac to the spermatic cord, which instead of lying behind or being spread out over the surface of the tumor lies in front of the hernial sac, the pedicle must be traced back into the abdominal cavity, when, if it is the bladder, it will lead you down to the pubic bone. Gerster, in one case, after opening the tumor, recognized it as bladder by touching the internal orifice of the urethra.

The injection of fluid, per urethram, fills out the tumor or flows through the wound. The point of a sound may be made to range in the prolapsed portion, or to approximate it.

Even when the bladder is wounded it is not always easy to recognize it; clear colorless limpid urine may be taken for peritoneal fluid, or that from a cyst. The application of the tests given above will help to make the recognition complete.

Wounds may be inflicted upon the bladder, while carefully and cautiously dissecting away adhesions, and are then usually small in extent, or they may be made boldly after ligating the supposed sac and cutting away the ligated portion, or the viscus may be pricked by needles in suturing the walls of the canal, or the bladder may be torn inadvertently in trying to separate the hernial sac from it.

If the bladder is recognized before injury it is our duty to free it and return it, closing the canal with sutures as usual. In old and debilitated subjects it may not be possible, nor even advisable, to dissect the bladder from the surrounding parts; it is then better to leave the pouch in situ and pack with iodoform or sterile gauze. If, as is very unusual, a distinct diverticulum of the bladder is found, it may be excised and the rent closed.

When the bladder has been wounded and recognized, it may be treated by the open method by ligature, or by suture. In the open method of treatment absolutely free drainage is required. If this can be obtained and maintained, many of the cases will recover; some with a permanent fistula, but a small fistula generally closes spontaneously, though a secondary operation may be called for to close the sinus.

Suture is the best and most reliable means of closing the wound. The suture material may be of very fine silk or catgut. They should be made to include all the coats, except the mucous lining; they should be about 10 or 12 to the inch, and consist of two or three layers.

The external wound may be closed, or if sepsis is suspected a drain may be left in for a few days.

Catheter à demeure may or may not be required. In any event frequent evacuations of the bladder must be maintained, either voluntary or by catheter every two hours, in order to relieve or prevent stress upon the sutured bladder wound.

If the bladder has been wounded and the discovery has not been made, and the wound closed, then in a few hours the dressings will be found soiled with a sanguineo-urinous moisture, or the urine from the bladder will be found blood-stained, and pain

and tenesmus will be troublesome and frequent micturition present. The wound in such case must be promptly reopened and the injury sought for and secondary suture of the bladder made or free drainage and packing resorted to.

The mortality of these cases has been high, but not due to the injuries to the bladder, but rather to concomitant circumstances, such as strangulated herniæ of long standing, and in debilitated persons of advanced age.

PERSISTENT VOMITING IN AN INFANT.

BY E. A. HALL, M.D., VICTORIA, B.C.

A somewhat interesting case of persistent vomiting in an infant, which recently came under my care, presented certain features from which lessons may be learned. Although having had most careful treatment, all nourishment was ejected within ten minutes after feeding. The child at seven months weighed no more than at birth; bone development normal; abdomen tympanitic; no normal bowel movement from birth; what little feces passed resembled meconium. The stomach was not enlarged, but peristaltic waves could be recognized after feeding.

Upon the diagnosis of pyloric obstruction, I did a posterior gastro-enterostomy. The stomach was normal in size; muscular coat unusually well developed; no thickening of the pylorus; the transverse colon greatly distended, and the intestines absolutely empty. The child lived twenty-four hours. A post-mortem showed the anastomosis perfect; the mucous membrane towards the pylorus covered with tenacious mucus, and the pylorus completely obstructed by a plug of mucus of leathery consistence. The lumen of the pylorus was 35 centimetres.

Here was evidently a case of catarrhal gastritis, involving the pylorus with exudation of sufficient mucus to obstruct the outlet, with subsequent non-development of the pylorus, by virtue of its functions having been interfered with. However, explain it as we may, the obstruction was complete, and had

evidently been of some standing, since there was not a vestige of food in the bowels.

The occurrence of cases presenting similar symptoms as those herein outlined, are by no means infrequent. Between congenital atresia and obstruction, owing to catarrhal inflammation existing from birth, I know of no method of differentiation, save that the latter might give way to persistent lavage, which was not tried in this case. Failing this, surgical methods are indicated, and this should not be delayed until the child's vitality is all but exhausted. Gastro-enterostomy is not more difficult in an infant than in an adult, and much more rapidly accomplished. Great care should be taken to provide against the loss of bodily heat during the operation, and immediately afterwards. Nutrient enemata should be given for a few days previous, and a few ounces of peptonized milk injected into the duodenum before applying the clamp.

With the failure of gastric lavage in persistent vomiting of infants, in which no normal feces have passed, gastro-enterostomy is the rational treatment, and, if done early, should hold out excellent hope of success.

MEDICAL THOUGHTS DURING LEISURE HOURS.

BY JAMES S. SPRAGUE, M.D., STIRLING, ONT.,

Author of "Medical Ethics," etc.

"Read not to criticize, but to consider, to adopt, to confirm or to neglect."

"Auto tanta soi didosi."—*Herodotus*.

Acestes (named by Virgil), with skill and strength, drew a good bow, yet while shooting at the stars his arrows struck nothing and were lost; their passage through the air was marked by a dazzling light—this and nothing more—*arundo signavitque viam flammis . . . consumata in ventos*. Well, brother, such are my thoughts while writing these words—thoughts that my writings are useless—for neither with skill or even strength are they given expression; yet no one will deny the fervency of interest that is manifested in my words—and *words only*. Even such an ending of impetuosity as Macaulay attributes to the philosophy of the brilliant words of Plato,

whose thoughts, although expressed in the choicest words in the noblest of languages, were such as were in opposition to the teachings of Bacon, which may be briefly stated in the sentence: *Usi et commodis hominum consulimus.*

Such, thus, my brother, is the incentive, motive or ambition in these, my cerebral bubblelings, to present in everyday expression in words such reflections of interests that are practical, in order to illustrate whither we are drifting, for too much is being written that appeals to the few among us, and not that which attracts the attention, and arouses interest in matters in which the profession treasures its reputation, its well-being and its future dreams; and although difficult is it for one situated as I, with the work of the ordinary country doctor, to write these lines, being subjected, as I am, to the usual interruptions incident to country practice; yet if not *honey*, *wax* I bring to the hive; and in doing this act, neither do I expect praise, for such I do not exact, or ask; neither do I expect *charity*, for such, strange to state, is not a characteristic of the profession, although Osler urges the exercise of this divine virtue, while much lamenting its evident absence among us.

The Nurses' Charter.—In these words, in large letters, the daily papers announce the fact that the nurses will shortly present to the Legislature of this enlightened Province a bill for their incorporation, and also a request that the nurses' organization may be affiliated with our Provincial University for purposes of degrees or of graduation. With the prescience of an ordinary observer and no day dreamer, you and I, who have watched the encroachments on our work and progress by these so-called co-workers, were in no sense surprised when this announcement appeared, for such a self-exalted *profession*, *self-styled profession*, which so many *unthinking* men in our profession have endeavored to place on so exalted a level by teaching nurses such subjects as are really the property of medicine—and no other interest wants its *rights*. And now the *profession* (?) of nursing, which the profession of medicine has nursed in its bosom, has acquired such strength that it wants graduation. If so, what *degree* is in view? Does it want the *Doctorate* in nursing? Does it want N.Gr.; Gr.N., or Gr. in N.? Probably the more ambitious will not be content unless there is *doctor* mixed in the words of the degree; if so, then the Christian Scientists, the Osteopaths, or other visionaries who now are, and are constantly arising will, no doubt, be aroused to present similar requests for university honors, for even now

several universities, forgetful of their honored positions, yet lacking in endowments and other supports, are establishing new faculties and debasing the title of *doctor* by bestowing it on all comers. It is, indeed, useless to mention these views, which I well know are such held by all faithful men, who quietly lament such mercenary characteristics in the gifts of cheap degrees—and actually horrified and bewildered at their multiplicity are we, when we read the universities' calendars or announcements. Nailed to an old elm tree, opposite an ordinary country house, on the main road in a section, but a few miles distant from this centre, is an unpretentious piece of a pine-board, on which appears: "*Dr. Brown, V.S.*" Such is common, however, but "*Dr. Smith, V.S., Veterinary Dentist,*" such as I saw on a barn-door at a village in this county was eclipsed by "*Dr. Jones, V.S., Veterinary Homeopathist,*" which I saw very recently in a Western paper, published beyond the Missouri River. Thus when the universities—fortunately they are few—give such cheap degrees, of which the above are fair samples, not forgetting the "Doctor in Optics," it is time, says a friend, whose letter I received very recently, that we assume the plain "Mr."—and such he has done, for his card bears the plain "Mr. ———, Physician, Providence, R.I." Yes, we who consider the changes that the years make lament that while our universities are increasing the years for attendance and the requirements for our doctorate, yet our position, as our old teacher, the scholar, Dr. John Sangster, once remarked, is fast losing its honored name and usefulness among the people, and the causes leading to such deplorable ends may be ascribed, if carefully studied, to universities that grant the doctor's degrees to other than the three learned and well-known professions. "Profession," "graduate," "college," "degrees," as words are misplacing such expressions as occupations, callings, business, apprentice, qualification, seminary, academy, certificates, diplomas; as "wine-clerk" for bartender, and as "mail contractor" for stage driver; "tonsorial artist" for barber; "doctor" or "dental surgeon" for dentist; "veterinary surgeon" for farrier, an old, yet very appropriate definition; "principal" for headmaster of high or common school; "minister" for clergymen or preacher; "collegiate institute" for a better term, grammar or high school. And as regards "doctor," it, through the efforts of colleges, is assuming as many meanings as names that are given to a valise, and I pardon the man, who signs his name Dr. Stewart Brown, M.D., for osteo-

paths, vitopaths, dentists, farriers and professors in music afford him lessons. The word "university" is often misapplied, and as illustration I refer to the *Year Book* of Trinity College and the announcement of Victoria. Such are not universities in any sense; no more entitled to use this word than are hotels deprived of their licenses empowered to keep attached to their buildings the sign bearing: *Licensed to sell wine and beer, spirituous and other fermented liquors.*" Yet the *university* is still printed on the year-book of Trinity and in the calendars of Victoria. My diploma from Trinity bears only *collegium*, and no evidence is there that Trinity is an university. These brief considerations in reference to misapplied designations of occupations, etc., are introduced to illustrate the weakness of mankind for gilt-edged titles, and the debasement of our own title, which is so rapidly becoming of no merit, that if the trained nurse wants a *doctorate*, or a degree, and can pay the money for it, let her have the graduation, if not, the organization will start a *university* "of its own"—and it may be remembered that Mrs. Eddy, of Christian Science celebrity, conferred from her *university* the degrees of C.S. Bach. and C.S. Doctor. Not wishing to write a paper on popular delusions, or the madness of the people, it is hoped enough has been stated, yet we wish Sarah Ann Smith, N. Doct., every success.

In keeping up with university traditions and customs the cowl or hood of the nurses' academic vestments, a learned friend suggests, should emblematically represent *une pot de la chambre à coucher pour la tête*, as the horse collar may with equal propriety be utilized when D.V.S. is bestowed. These are only suggestions and nothing more—such as Horace or Juvenal would make if able "to view the pale glimpses of the moon," and to witness the scrambling of the crowd for meretricious, so-called honors, graduation and degrees from departmental sources. The business, occupation, or, to be more particular, the *profession* of the nurse is divine, but the divinities engaged in it, in my views of practical philosophy, would more fully be carrying out the decrees of the Great Architect of this universe if, instead of listening to the description of the actions of medicines given by some egotistical house-surgeon (whose diploma bears the words "*Fidus in arcanis*"), if, instead of molding—to the thorax of Dennis O'Brien, or watching operations on barren women, she held in her lap the fruit of her womb (*fructus ventris*), and then the highest eulogy, "*Benedicta inter mulieribus*"—higher than that of *doctor* in nursing—

is what men and angels give; and the marriage certificate—for the benefit of this "*Canada of ours*," this land of *milk and honey*—is a nobler adornment for the chamber than the cheap diploma. We want our own women—*young women* in whom desire has not failed—to nurse and to feed their *own* progeny, and with the pabulum from their *own* loyal paps. A sad sight it is to notice how many are doomed—self-doomed—to leave the world no copy of themselves to defend our shores and help in the world's great promised blessings and progressive movements, which their noble sires left foreign shores to seek, lived to enjoy, and as legacies left their children. In every community there are many spinsters with abandoned hopes, from choice or from necessity, thus placed in the list, and there, too, are many widows with sympathetic hearts, who at home and in their neighborhood have intelligently watched the sick with all the love and attention that humanity can uphold or expect, even where "*fever's fires burn low*," and fervid friendship to its highest tension, supports the tottering urn, where passion and love long have burned in noble hearts. These noble women we have in this, and you have in your vicinity, and as for the first named, through the evident irritation of the gods, no epithalamic songs such as Pindar or the divine Catullus gave us are to be chanted, and the last named, heard in life's springtime—that after years of joy, sunshine and sorrows—and its fitful fevers, in visions, appear as a tale that was told, or as echoes of a long-forgotten hymn. Yes, these noble women at home can safely and intelligently console and watch the sick—for having followed the decrees of high heaven, it is well for their daughters and their sisters, "*passive factors in the reproductive act*" (Tait), to remember "*the night cometh when no man can work*," "*when the frost is on the pumpkin and the corn is in the shock*," and that opportunities (to use the words of Hippocrates) are fleeting. With the same earnestness which Dr. Bruce, of Toronto University, exercised, when presenting his admirable address, "*Medical Ethics*," to the medical students, when he urged young M.D.'s to marry, I recommend the same incentives to all intelligent nurses.

(To be continued.)

The twisting of the pedicle of a small ovarian cyst may simulate both the symptoms and the signs of attacks of appendicitis.
—*American Journal of Surgery*.

Clinical Department.

A Case of Lipoma in the Right Ventricle of the Heart. R.

ADAMS BREWIS, M.D. (EDIN.), in *The Linct.*

The following case of fatty tumor growing from the inter-ventricular septum of the heart seems worth publishing as I have been unable to find a similar case occurring in the human subject in medical literature. Paget mentions "a singular case of fatty growth connected with the heart of a sheep." In describing the specimen he states: "The right ventricle is nearly filled with a lobulated mass of fat, distending it, and pressing back the tricuspid valve. The left auricle and ventricle are similarly nearly filled with fatty growths and fat is accumulated on the exterior of the heart, adding altogether about twenty-five ounces to its weight. The textures of the heart itself appear healthy."

The patient in the case now to be described was a girl, aged seven months. She seemed well until 2 p.m. on June 16th, 1905, when she vomited some "yellow bile" and refused the breast. After 9 p.m. she seemed worse and began "turning up her eyes." The parents, fearing a convulsion, sent for me, but on my arrival at 10.10 p.m. I found life extinct. The child was pale. The mother said that there had been no cyanosis. Two months previously the child suffered from a severe attack of whooping-cough. The coroner, Mr. E. M. Grace, ordered a post-mortem examination, which was made forty-one hours after death. The body was well nourished, hypostatic congestion was somewhat marked, the abdominal organs were in the normal position, and there was no peritonitis. The external surface of the stomach was healthy; it contained four fluid drachms of semi-digested milk; its mucous membrane seemed congested and was of a slate-grey color. The intestines, liver, spleen, and pancreas were normal. The left kidney was normal. The right kidney was slightly enlarged; the capsule stripped off easily; the surface appeared normal; on section the cortex was seen to be slightly swollen; the surface was mottled pink and yellow, and the Malpighian bodies were prominent. The pleura was normal. Except that their anterior borders were emphysematous the lungs were healthy. The pericardium was normal and contained no fluid. The heart was normal in position; the ven-

tricles were contracted; the left auricle was collapsed but the right auricle and the veins leading to it were distended. There was a normal quantity of fat on the surface of the heart. On section the heart substance was found to be healthy. The left ventricle and left auricle were empty. On opening the right ventricle a fatty tumor was found growing from about the centre of the interventricular septum and passing upwards through the auriculo-ventricular opening which it completely blocked. The right auricle was distended with blood. All the valves of the heart were healthy. On careful examination no other fat was found in the interior of the heart. The veins of the brain were much distended; the membranes and brain substance were healthy; the cerebral ventricles were empty. The tumor in the heart was pyriform in shape, two inches in length, and weighed in the fresh state nine and a half grains.

I regret that I was unable to obtain the heart with the tumor *in situ*.

Notes on Some Unusual Bladder Cases.—Value of My Phonophore in Determining the Presence of Stone Formation in Bladder Diverticula. FOLLEN CABOT, M.D., Genito-Urinary Surgeon to the New York City Hospital, in the *Post-Graduate*.

A. B., aged 35, waiter, single, American; came to my clinic at the Post-Graduate Hospital April, 1905, suffering from very frequent and intensely painful urination. Symptoms very urgent. External urethrotomy a year ago, at which time his symptoms were somewhat similar to his present ones. Got practically no relief as a result of the operation. Has a distinctly alcoholic history, and when drinking heavily is always much worse; being troubled at such times with continued dribbling or complete retention.

I found that a sound of medium size slipped into the bladder without much difficulty but caused severe pain, for which I had to cocaine the urethra. Some urine was then drawn by catheter which was very foul and full of thick ropy mucus and many shreds. Patient says he has passed gravel on several occasions. After prolonged washing of bladder a cystoscope was introduced with some difficulty, but owing to the blood and mucus little could be seen. However, more washing was resorted to and then adrenalin injected. With this a fair view could be obtained but each motion caused the patient great pain. The bladder was very red and edematous. In several

places large flakes of membrane could be seen adhering to the bladder wall. A very pronounced desquamative or diphtheritic cystitis. The ureters were not visible. I saw no distinct ulcerative process nor could I see anything of a malignant or tuberculous nature in any part of the bladder. Near the region of the left ureter but further back and laterally could be seen a white patch of tenacious closely adherent mucus. This patch was about the size of a cent and could not be washed off. In order to remove it I employed my bladder forceps, and by their aid I managed to remove some of this adherent mass. In what I obtained on the forceps I found considerable gritty deposits like coarse sand. Suspecting something back of the patch I next attached the phonophore, a description of which appears in *The American Journal of Urology* for March, 1905. With this instrument I penetrated the place where the white spot was attached and by its aid detected a diverticulum about an inch and a quarter deep and apparently full of small stones. I tried with the forceps to clear the cavity out, but on account of the pain and blood I was unable to accomplish my object. For a few weeks I endeavored by thoroughly washing the bladder to improve the condition but with no marked success. I then suggested an operation and the patient being in great distress and unable to work, readily agreed to it. He was then admitted to the hospital and I operated on him.

After a perineal cystotomy I introduced my finger into the bladder and in a few seconds pushed it to the bottom of the diverticulum. The pocket was a little larger round than my index finger. The patient was thin and I had no difficulty in exploring the whole of the bladder cavity. There was no true ulcerative process present but I suspect there would have been later. The pocket was full of little granules about the size of uncooked rice particles. I cleaned them out thoroughly with my finger and a dull curette, then by means of direct irrigation I gave the cavity a complete washing. With dull scissors I cut several incisions into the pocket, thus much enlarging the openings into the bladder proper. Before finishing the operation I carefully scraped the whole bladder with a dull curette. I put in place a large perineal drainage-tube and the bladder was drained for two weeks. The man left the hospital with the perineal wound rapidly healing. I have since examined him several times with the cystoscope and found a much improved condition with comparative freedom from mucus. The pocket has shrunk down so much that it contains no stones.

The patient now holds his water four to five hours, has no

pain and is doing steady work. I am still washing his bladder with peroxid and silver once or twice a week. He also reports a gain in two months of thirteen pounds.

CASE B.—G. J., a man of 45, coachman, of full habit, weighing over 200 lbs., was operated on by me two and a half years ago for tight stricture in membranous urethra. At that time he had been suffering with symptoms of urinary obstruction for ten years, gradually getting worse till, when he was brought to me, he had complete retention. The straining to empty his bladder had been extreme for several years. I did an external urethrotomy, freely incising a tight fibrous stricture. Owing to his great weight it was impossible to thoroughly explore the bladder with my finger. I left a large perineal drainage-tube in the bladder for two weeks. The patient made a good recovery. No cystoscopic examination was made at the time of this operation. On the tenth day a 32 F. sound could be easily introduced through the urethra. Patient was discharged to his home in Vermont with advice to use uretropin and wash out his bladder twice a week with boric acid solution. In addition his physician was advised to use a full size sound once a month. The patient's stream was strong and full after this but the urine did not entirely clear up, and he complained of considerable pain in the lower back and testicles. Examination of the urine showed much pus and ropy tenacious mucus but no evidence of kidney involvement. Things went on in this way for about a year and a half when I attempted a cystoscopic examination. The pain and the urethral spasm were so severe, however, that the examination could not be satisfactorily completed. The patient would not submit to general anesthesia. Three months ago the condition being about the same, the man came to me again and I advised a cystoscopic examination and another operation if necessary. I suspected a bar at the bladder neck which, forming a pouch, caused trouble by preventing complete voiding of urine. I could determine no prostatic hypertrophy. The patient consenting, I made a cystoscopic examination under general anesthesia. I found a much hypertrophied and chronically inflamed bladder. At the bladder neck undoubted evidence of a bar which without question came from his years of straining. The ureteral openings were apparently large enough to admit the finger tip. The presence of much tenacious mucus and free bleeding made the examination a difficult one, constant irrigation being necessary. Well back and to the right side a very firm spot of whitish mucus could be seen. It was about the size of a quarter. I examined this spot carefully with the

phonophore, suspecting a pocket and possibly the presence of stone formation. I easily demonstrated the presence of a shallow pocket in which there was much gritty substance in combination with the tenacious mucus filling up the cavity. The patient had passed gravel on one or two occasions. A perineal cystotomy was performed, the bar at the bladder cut through and the pocket thoroughly scraped out. I would have preferred a suprapubic operation but I had obtained consent for only the perineal route. A large perineal tube was put into the bladder and for two weeks drainage was continued. I used peroxid freely and at the end of the two weeks I removed the tube, the wound healing rapidly. The bladder would then hold ten to twelve ounces, whereas before four ounces was about the limit. It is too soon to say what the result will be. The pocket may trouble him again, but I am convinced that if it does I can by the aid of the cystoscope and forceps attachment remedy the trouble. In this case prolonged vesical lavage is imperative and is being carefully carried out.

CASE C.—T. F., aged 70, male, no occupation; has for eight years been suffering from symptoms of urinary obstruction. Prostate does not seem hypertrophied. By the advice of a physician he has been washing his bladder twice a day with two per cent. solution of boric acid. This treatment he has faithfully pursued for several years with the result that the bladder is very tolerant to instrumentation. A stone was crushed two years ago, and he came into the dispensary to find out if another one had recently formed. I examined with the cystoscope which was introduced without difficulty. The field of vision was clear, showing a fairly healthy bladder membrane, and on the right side, loose, was a pure white stone; size and shape of a small horse chestnut. On the patient's left and about an inch back of the ureteral opening I found a diverticulum with an opening the size of a cent. It seemed to be about an inch and a half deep, its lower wall not being visible as it sagged down below the opening. In order to test this cavity for stone or gritty deposits I used the phonophore but with a negative result. The patient suffered very little from the examination which was done without cocaine. I was enabled to demonstrate the unusual condition to several students. It is possible that the stones the patient has had may form in the diverticulum and then be dislodged and grow larger in the bladder proper. He has passed several small stones by the urethra.

The great value of the cystoscope can readily be seen in this case as in the preceding ones. A crushing operation was sug-

gested, but the patient decided to wait a while longer. The stone gives him very little inconvenience.

CASE D.—M. R., aged 65, had suffered from pronounced prostatic obstruction for years. This patient was referred to me by Dr. Albert Warren Ferris. In addition to the symptoms due directly to his hypertrophied prostate he had a diverticulum of the bladder holding about eight ounces. The patient had noticed for some years, after emptying his bladder and retiring for the night, that he would feel the need of immediately repeating the act. Previous to the operation he had been catheterized for ten days each six hours. It was then observed that after the urine had been drawn a change of position would cause about eight ounces more urine to flow from the catheter. At the operation, which was done by the suprapubic route, a large prostate was removed and the bladder carefully explored. No preliminary cystoscopic examination had been attempted owing to the patient's condition. I found both ureteral openings large enough to admit a finger tip, and on the left, back of the ureteral opening, I put my finger into a large cavity with an opening the size of a quarter. There was not the least sign of stone formation in this diverticulum or in the bladder proper. My friend, Dr. Hagner, of Washington, D.C., writes in regard to the phonophore: "I have demonstrated a cystic stone in a diverticulum with your searcher. It is certainly an excellent instrument."

Do not empty a thyro-glossal cyst by aspiration before extirpating it. It is well to inject the cavity with a methylene blue solution first, in order to make sure that all parts of the cyst wall will be extirpated. Another method is to first empty the cyst and then fill it with paraffin.—*American Journal of Surgery*.

Chloroform should not be administered too close to a gas jet or gas stove, as its vapors are thereby decomposed, forming products which, when inhaled by the patient, surgeon and assistants, may give rise to disagreeable and even serious effects, such as nausea, vomiting, and pulmonary and renal irritation.—*International Journal of Surgery*.

Therapeutics.

Acute Infective Diarrhea.

As regards the treatment of acute infective diarrhea, Dr. F. E. Batten (*The Clin. Jour.*, Vol. xxvii., No. 12, 1906), suggests the following:

(1) Hypodermic injections; (2) transfusion; (3) baths; (4) stomach washing; (5) rectal irrigation; (6) feeding; (7) stimulants; (8) drugs.

(1) With regard to *hypodermic injections* of strychnin there is no doubt that this is one of the most valuable remedies which we possess in conditions of extreme collapse, and it is quickly and easily administered.

(2) Two methods of *transfusion* are possible, subcutaneous and intravenous. Intravenous is difficult to perform and has no advantage over the easily performed subcutaneous injection. The apparatus needed is simple, and consists of a rather long hypodermic needle, two feet of rubber tubing, and the cylinder of a glass syringe. A solution of salt (one drachm to a pint of water) at a temperature of 150 degs. F. is used, under pressure of about 18 to 24 inches. The injection is best made at the side of the thorax, the point of the needle being directed upwards to the axilla, and at least one and a half inches within the skin. About four ounces of the solution should be allowed to run in.

The length of time required varies greatly in different children; in some cases the whole will run in in twenty minutes, in other cases it will take nearly an hour.

With regard to rapidity of absorption, again there is very great variation; in some cases the fluid is absorbed almost as rapidly as it is injected, whilst in others it will take several hours before absorption is completed.

The proceeding is free from all danger, and the only complications which I have seen arise are subcutaneous hemorrhage and suppuration, with the formation of an abscess; and during the past summer, in which transfusion has been many times performed, no instance of either of these complications has occurred.

(3) *The hot bath*.—This is a most valuable remedy, and the only question is when it should be applied. If the child is not

very bad, it may be given first of all; but if the child is very bad, I would sooner transfuse the child than give it a hot bath. The temperature of the bath should start at 100 degs. F. and should gradually be raised, and a child will stand a bath of 110 degs. F. with benefit. Mustard should be added, as it stimulates the skin, dilates the vessels, and diminishes the peripheral resistance.

Are there any conditions under which it is inadvisable to give a hot bath? From my experience I should say that if a child is very bad it is better not to give a hot bath, but to trust to transfusion and strychnin and local warmth, hot bottles, and warm-water cushions. I may say that I think pyrexia in itself is no contra-indication to a hot bath.

(4) *Stomach wash-out*.—This should be done with a large size tube, No. 14, with a solid end, to which is attached 12 inches of india-rubber tubing. The tube should be passed through the mouth into the stomach. Some people endeavor to wash out the stomach by means of a nasal tube. Now, any nasal tube which will pass the nares of a child a few months old is so small that the curds and mucus soon block it. No harm ever results from the passage of the stomach-tube, even when the child is very bad, and the immediate effect is often strikingly good.

In one case only have I had any difficulty in passing the mouth tube in a baby, and in that child respiration stopped as soon as the tube was passed down. The tube was withdrawn and the child breathed naturally again. After an interval another attempt was made, with the same result, and on withdrawal the child breathed again. A nasal tube was now passed, and passed into the stomach and the stomach washed out. With this solitary exception I have never experienced any difficulty, and in this case no explanation of why the difficulty with respiration should arise was forthcoming. The stomach is washed out until the fluid which is used returns clear and moderately free from mucus. The fluid used has usually been a solution of sodium bicarbonate, two grains to the ounce.

(5) *The rectal irrigation* is performed in the usual manner with hot water, some six to eight ounces being allowed to flow in from a tube passed well into the rectum, about 12 inches being the pressure usually exerted. The irrigation is continued till the returning fluid is clear of mucus. In some cases the use of four ounces of one-half per cent. solution of protargol after the wash-out is beneficial.

And now I come to the most important part of the treatment, viz. (6), the *feeding*, and I think that most observers are agreed that milk in any form should be entirely stopped. Numerous substitutes, such as barley water, albumen-water, hot water, rice-water, may be used. During the past summer I have used albumen-water almost exclusively—the white of one egg with four ounces of water. The child, according to age, is given one to two ounces of that with 10 to 20 minims of brandy every two hours. This diet should be continued for three days at least, and then into each two ounces of albumen-water one drachm of whey should be added; this is gradually increased according to the general condition of the patient, until he is taking equal parts of whey and albumen-water. Usually at the end of the first week to this mixture one drachm of citrated milk, or of peptonized milk, may now be added. I have used citrated milk, for I find that in the majority of cases it is taken as well as peptonized milk and does not cause vomiting or curds in the motions, and I use the citrated milk of such a strength that there is one grain of sodium citrate to one ounce of milk. If the citrated milk does not agree or curds appear in the motions, peptonized milk may be substituted.

Having reached this stage, the further steps are simple; the amount of citrated milk is increased and eventually is replaced by ordinary milk diluted to the capacity of the child.

Such may be said to be the lines on which these children should be treated, but in practice constant and often seemingly minute changes are called for.

With one set of preparations I have been most unsuccessful, and that is in the various forms of meat-juice. I have given raw meat-juice, various proprietary preparations, and meat extracts, but almost all have been attended with failure, and in most the diarrhea has been markedly increased. It must, however, be said that this form of feeding has been only tried in those cases which did not respond to the albumen-water treatment above described.

(7) *Stimulants*.—Ten to 20 minims of brandy, given every hour or two hours with the albumen-water supplies all the stimulant which is necessary by the mouth.

Sherry in the white wine whey is also of use, but on the whole I prefer brandy to any other stimulant.

(8) With regard to *drugs*, during the acute stage castor oil and calomel are alone of much service. Objection has been raised to castor oil because it tends to make the infant vomit.

My experience is altogether favorable with regard to castor oil. After the stomach has been washed out one to two drachms of castor oil are given, and in only a few cases has it been vomited.

In dealing with the after-effects of an attack of acute infective diarrhea, each case needs individual treatment, according to the system most affected. In those cases in which the digestive functions have become impaired, the most careful regulation of diet is necessary, and this has to be continued for weeks; even so improvement is slow and relapses are frequent. One of the most fatal after-effects is the general edema which occurs without obvious cardiac or renal lesions.—*Post-Graduate*.

**The Treatment
of Shock.**

Vasomotor relaxation has long been recognized as the important factor in the production of shock, but the researches of Crile during recent years have undoubtedly added renewed interest to the subject. The question of treatment has also become pretty well crystallized, and prophylactic measures occupy a position of greatest importance. For the shock itself, physiological salt solution and adrenalin have come to be regarded with the greatest degree of favor. Strychnine has largely been employed as a stimulant in this condition, but its value is questioned by many, as it has been shown by animal experiments that this drug exerts little or no influence in raising the blood pressure, which is the essential feature of the treatment. An interesting symposium on this subject is presented in the pages of the December number of the *Therapeutic Gazette*, in which the opinions of a number of leading surgeons have been included.

W. W. Keen has now given up entirely the use of strychnine in shock, basing his change of opinion as to the value of the drug on Crile's researches, and he is very well satisfied with adrenalin, which he has substituted for the former. E. E. Montgomery lays particular stress on the preventive treatment of shock; but when it does occur he advises the injection of a single large dose of strychnine (gr. 1-20-1-5) as a cardiac stimulant, and, in addition, hypodermoclysis or intravenous infusion of a one per cent. solution of sodium chloride containing adrenalin. Repeated doses of strychnine are cumulative, and

he therefore advises subsequent injections of some aseptic ergot preparation as an excellent means for increasing the contractile power of involuntary muscular fibre, relying on this as the most effective agent against shock, next to salt solution. Edward Martin favors strychnine as a tonic before operation, but during and after the same he has abandoned its use, particularly in the case of pure shock which is primarily due to trauma and can be helped neither by drugs nor by hypodermoclysis. The latter, in his opinion, is useful merely in favoring elimination, and should be given so slowly as to be immediately absorbed. The only drug which seems to have any effect at all in desperate cases is adrenalin, and to be effective this must be given intravenously and in extreme dilution (1:20,000). When hemorrhage complicates the case, intravenous infusions are of value only if given slowly and repeatedly.

Da Costa is convinced that Crile is correct in his views as to the futility of strychnine in the treatment of shock, as it merely hurries the circulation without strengthening it, and its effects are only transitory. Adrenalin in small amounts hypodermically is also transitory in its effects, but when given intravenously in salt solution and very slowly, it is a remedy of the highest importance. La Place contends that the slow absorption which has been observed to occur when strychnine is given, in a measure explains the inefficiency of the latter in cases of deep shock, and also accounts for the large doses tolerated when the circulation is thus depressed. Restoration of the circulation is always the most important consideration, and La Place believes that this may be most effectively secured by the application of the electric current. Notwithstanding the experimental evidence adduced against strychnine, H. A. Hare favors it as stimulant of the entire organism, and although it may have been relied upon too much in the past, he believes that it should not be cast aside entirely, but be used in connection with the other measures advocated for the treatment of shock.—*Medical Record*.

If a cystic swelling in the scrotum is opaque when examined by the well-known transillumination test, especially if a history of traumatism is elicited, it may still be a hydrocele. Admixture of blood in the hydrocele destroys its translucency.—*American Journal of Surgery*.

Physician's Library.

Photographic Atlas of Diseases of the Skin. (Physicians' Edition), in four volumes. A series of ninety-six plates, comprising nearly two hundred illustrations, with descriptive text, and a treatise on Cutaneous Therapeutics. By GEORGE HENRY FOX, A.M., M.D., Professor of Dermatology, College of Physicians and Surgeons, New York; Consulting Dermatologist to the Department of Health, New York City; Physician to the New York Skin and Cancer Hospital, etc. Volume IV. Philadelphia and New York: J. B. Lippincott Company.

This volume completes the series. It takes up Prurigo, Pruritus, Purpura, Rosacea, Scabies, Scleroderma, Scrofuloderma, Sycosis, Syphiloderma, Trichophytosis, Urticaria, Verruca, Vitiligo, Xanthoma, Zoster. Then follows a chapter on General Considerations, based on the author's own personal experience. Following this comes the plates, with short descriptions of each. Taken altogether, the four volumes, constituting this masterpiece as an atlas in dermatologic science, are each in themselves complete, embracing the entire field of diseases of the skin, as encountered by the general practitioner, who will make no mistake in making it his standard in the practice of that branch of medicine. We have to express our thanks to the Canadian representative of J. B. Lippincott Company, Mr. Charles Roberts, Ontario Street, Montreal, for the pleasure and profit of examining this most excellent work.

Practical Dietetics, with Reference to Diet in Disease. By ALIDA FRANCES PATTEE, Graduate Boston Normal School of Household Arts; Late Instructor in Dietetics, Bellevue Training School for Nurses, Bellevue Hospital, New York City; Special Lecturer at Bellevue, Mount Sinai and the Hahnemann Training Schools for Nurses, New York City. Third edition. New York: A. F. Pattee, publisher, 52 West Thirty-ninth Street.

That this concise, clear, practical little handbook should have gone through three editions in less than that number of years is sufficient evidence that there must be something good between its covers, as, indeed, there is. The author has drawn some

from the works of such well-known men as Gilman Thompson, Max Einhorn, Henry Koplik, Emmet Holt, Louis Starr, F. C. Shattuck and others. It is a satisfactory book on dietetics, and will be found of much value to the purchaser.

Webster's International Dictionary of the English Language, being the Authentic Edition of Webster's Unabridged Dictionary, comprising the issues of 1864, 1879 and 1884, thoroughly revised and much enlarged under the supervision of NOAH PORTER, D.D., LL.D., with a voluminous appendix to which is now added a supplement of 25,000 words and phrases. W. T. HARRIS, Ph.D., LL.D., Editor-in-chief. New edition, with supplement of new words. Springfield, Mass., U.S.A.: G. & C. Merriam Company.

The making of a dictionary is a work of stupendous magnitude. The revision of one, even though it involved a supplement of twenty-five thousand additional words, would seem not so great; yet, in order to place before the public a comprehensive, accurate, up-to-date and symmetrical production, it has taken over ten years to do that work, and that by a large editorial staff. So far as the ordinary mind can judge, the work of revision has been performed in such an exceptionally able manner as to make it a masterpiece; no doubt, the very best production of its kind in existence. For many years Webster's Unabridged Dictionary was a household word: always the final court of appeal to decide on in argument as to the proper meaning or pronunciation of a word. Now it is Webster's International Dictionary which holds the boards, and is the best and most universally known and used dictionary in the English language.

The Eye, Its Refraction and Diseases. By EDWARD E. GIBBONS, M.D., Assistant Surgeon of the Presbyterian Eye, Ear and Throat Hospital, Demonstrator and Chief of Clinic of Eye and Ear Diseases in the University of Maryland, Baltimore, Md. New York: The Macmillan Co., publishers.

Dr. Gibbons has given us in this work a most valuable treatise on the subject indicated by the above title. After going thoroughly into the subjects, which are more particularly peculiar to the work of the eye expert, he winds up his work with three chapters, which are of no little interest to the general practitioner, viz.: A chapter on Ophthalmic Migraine, a chapter on Associated Diseases of the Eye and Ear, and a most important one on Eye Lesions in General Diseases. In brief, we regard it as an excellent work.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only \$2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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Dominion Medical Monthly

And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVI.

TORONTO, MARCH, 1906.

No. 3.

COMMENT FROM MONTH TO MONTH.

THE *Maritime Medical News* for January came to hand in a brand new dress, which is quite becoming and greatly improves upon the former habiliments. In fact, there was a general new make-up all round, and one could hardly recognize it. Brer Ross is imbued with the "forward movement," and his improvements deserve to meet with success. The *Maritime Medical News* is a bright, readable journal, and we wish it every success.

DR. A. B. MACALLUM, Professor of Physiology in the University of Toronto, is to be congratulated upon being appointed a Fellow of the Royal Society of England. Professor Macallum has long been regarded, both at home and abroad, as a scientist of more than ordinary note, and by winning this distinction he

has brought both honor and dignity to his university and his profession. The university will not for long neglect to mark in a decided manner its tangible appreciation for a professor who has been able to bring such distinction to its portals.

IN the new hospital scheme gradually unfolding itself from day to day in Toronto, it is not known whether the question of a pathologist has been discussed. By this is meant the appointment of a good, first-class man by the hospital to exclusively devote himself to this work; and as we have entered on the day when the medical man, in offices of this character, is better paid for his work, we would advocate a competent salary to go along with the position. We fully believe this would be in the interests of medical education, and would leave the professor now in charge more time to devote to his department at the University. Heads of departments, like physiology and pathology, should receive something approaching what they are worth. Their present stipends are altogether inadequate. The man who takes up the scientific part of medicine and devotes his life-work to it deserves something more than a teacher's salary.

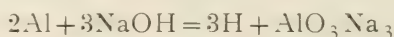
THERE are signs that the medical profession in Canada is going to be a different body in ten years to what it is now. Here and there all over the country we hear of new medical societies being formed, and we hear that some of them are doing things. One frames a tariff and all its members agree to abide by it. Another county organization says \$5.00 for insurance examinations, and all subscribe to the tenet. Still another says no lodge practice, and proceeds to carry out its law. Then the Canadian Medical Association is preparing for reorganization, and different societies are asking for affiliation with the national organization. The signs of the times are good; they show that medical men are coming together better than ever before, and a great deal of good must be sure to follow.

Now and again some medical orator decrys commercialism in medicine, that the profession is losing that most noble of all its attributes—charity. Commercialism in medicine may be good, and then again it may be bad. There are very few who would wish to cut down the dykes and let the flood of commercialism over all the plains of medicine. That would certainly be disastrous and ruinous. But the day of medicine without some commercialism, without some bookkeeping, without some account rendering, without collecting, is past and gone forever. Upon this point all are now practically settled, and it is only a few sporadic cases where one would find a doctor jogging along through life, taking a dollar, or a few dollars, here and there as bestowed on him. And yet, much as the business world loves business methods and despatch, a physician who goes jogging along day by day and year after year without ever rendering an account is looked upon by that self-same business world as something akin to a saint. But the wise man provideth for the ever-coming rainy-day in all walks of life. The practice of medicine is so constituted that one individual in all cases cannot do all that he would like to do, hence seeks the co-operation of his associates. And more than ever before, in the present day does the doctor need the co-operation of his fellows. The cost of living is enhanced in every direction, but doctor's fees remain just as they were when everything sold at a less price. As some one puts it: "The country's prosperity is the doctor's ruin." Probably the question will solve itself; the spirit of organization is in the air for some good. However, it is a sound doctrine to preach: Every man is entitled to the dollar which he earns.

Science Notes.

MATSURA, the Japanese scientist, has studied the differences in the calibre of hairs during sickness. It appears there is a variation in thickness, according to certain maladies. He says the medullary layer may be interrupted, whilst the hard layer it contains may entirely disappear. The process is analogous to the changes in the nails during disease.

IN the new process of manufacturing hydrogen gas now employed in some parts of Europe, the reaction of the alkaline hydrates upon aluminum is utilized. It is thus expressed:



This process was used by the Russian Erostatic Corps during the recent Russo-Japanese war.

By the intravenous injection of 8 cubiccentimetres of the emulsified yolk of a duck's egg in distilled water, according to M. Gustave Loisel, rabbits die from some minutes to two hours. Paralysis was produced in all. His conclusions are that the eggs of ducks, chickens and turtles are poisonous.

THE "Bertini noseroscope," or bad air detective, is the name of a new Italian invention, which is claimed to be an accurate indicator of the presence of foul and noxious vapors in general. The apparatus is intended to prevent accidents in the way of escaping gas from ranges, furnaces, pipes, etc. It has been patented in Italy, France and Germany.

DR. CARL BRENDL, of Tschupackowa, Russia, has invented a chair designed to prevent seasickness. The idea of the apparatus is to counteract the pitching, rolling, heaving and setting of the vessel. It has been already tried with success on one of the vessels of the Hamburg-American line.

DR. LINDSAY JOHNSON, an eminent British ophthalmologist, after investigating the eyes of animals for several years, confirms Darwin's theory that man is closely related to the Primates. The eyes of man and all the apes are practically identical. Each has the complex system of veins and arteries, and direct or parallel vision.

TAKEN at 9 o'clock in the morning and under test conditions of cleanliness, milk one hour later will contain 6,250

microbes per cubic centimetre; 25,000 four hours later; 310,000 after eight hours, and 11,250,000 after a lapse of twenty-four hours. This is in accordance with the experiments of two French scientists, Messrs. Nicolle and Petit. As a means of checking the growth of bacteria, Mons. A Renard has secured splendid results by a method which dispenses altogether with formal, borax, salicylic acid or other antiseptic. He uses oxygenized water, which slowly decomposes in the liquid without changing it in any way. Three per cent. oxygenized water is used, and in the recent experiments made by Mons. Renard at Rouen, at a temperature of 11 deg. C., the milk kept fresh without the least trace of acidity for a period of 95 hours. Dr. Debout (Rouen) gave this milk to 59 infants at a dispensary, with good results.

THE *Inhalatorium* is a new medical institution lately established in New York. It will carry out the treatment of diseases of the respiratory organs, nose, pharynx, larynx and lungs, by the inhalation of medicinal substances in vapor form, as conducted by the German specialist, Dr. A. Bulling, of Munich, who has invented for the purpose two forms of apparatus, termed "Guttafer" and "Thermo-Varitor."

THE different treatises on the subject state that cod liver oil should not freeze at zero degrees C. unless it has been adulterated, and in France the Commission of the new Codex has also accepted this characteristic, and it is to be required for medicinal cod liver oil. But according to the researches of B. Moreau and A. Biettrix it appears that there are specimens of this oil which do not correspond to such case. They observed different samples of oil, which were certainly of natural origin, and arrived at the following conclusions. Contrary to the usually accepted ideas on the subject, there exist at present in commerce among the medicinal cod liver oils certain absolutely pure oils which are cloudy in winter, because they have not undergone a previous cooling and filtration, and as for all the oils, the deposit only dissolves completely at a rather high temperature. Thus the appearance of cloudiness due to cold does not show an adulteration, but on the contrary is a natural characteristic of pure oils. This cooling of the oil does not seem to remove their active properties. The congealed and non-congealed oils are not found to be different in their usual qualities, as demonstrated by tests for iodine, saponification, percentage of iodine, etc.—*Scientific American*.

A METHOD for detecting the presence of aniline or salicylic acid in foods has been developed by C. Lawal. Pieces of wool are first prepared, from which the oily matter has been well removed by boiling in a soda solution and washing until all the alkali has disappeared. The substance to be analyzed is diluted with water and filtered. We take 100 c.c. of the filtered liquid, adding 4 c.c. of hydrochloric acid and put in a wool strip. The wool is then washed in cold water, then boiled in slightly acidulated water. In the presence of aniline colors, the wool becomes colored and the color is soluble in ammonia. It reappears upon acidulation, while the vegetable colors turn to red, green, or yellow in contact with ammonia. To detect salicylic acid, we treat the substance with water and sulphuric acid, taking up the liquid with ether. The latter is then evaporated on a watch glass and the residue is treated with ferric chloride. A violet coloration indicates salicylic acid. A flesh-colored precipitate shows benzoic acid. Should tannin be also present, it must be first precipitated by means of sub-acetate of lead.—*Scientific American*.

THE invention of a means for preventing the habit of snoring appears ingeniously handled in a recent device which consists of a flexible plate or mouthpiece adapted to be held between the lips and in contact with the teeth and gums when sleeping. The plate is provided with a check-valve adjusted to regulate the amount of air admitted to or expelled from the lungs through the mouth. The mouthpiece is elliptical and conformable to the shape of the mouth, and is formed of rubber, canvas or cloth. The plate is furnished with a flap-valve, which normally closes an opening formed therein, the valve being adapted to prevent ingress of air into the lungs through the mouth and to permit a small quantity to be expelled through the opening in the act of exhaling. By the valve opening outwardly air is compelled to enter through the nose passages, thereby preventing vibration of the uvula. If for any cause nose breathing is too difficult, the plate may be reversed, thereby admitting air, but an amount insufficient to cause vibration. The device if successful in obviating harsh nasal sounds, will be credited also with keeping the mouth from becoming dry and parched, cleansing the nasal passages and maintaining proper purification of air and its correct temperature. Mouth breathing entails a loss of forty per cent. of that warmth so highly essential to the lungs.—*Scientific American*.

News Items.

WINNIPEG General Hospital will erect a nurses' residence.

DR. ALLEN BAINES, Toronto, is spending a holiday in Jamaica.

It cost Hamilton, Ont., \$51,466 to run its General Hospital last year.

DR. D. C. THOMPSON, Bresayler, Sask., has gone to practise in Florida.

IN January there were 141 cases of smallpox, with no deaths in Ontario.

THE fund of the Toronto General Hospital now amounts to \$1,188,010.

MAJOR LEONARD VAUX, M.D., Ottawa, is to shortly move to Toronto.

THE cost per patient per day in 1905 at the Montreal General Hospital was \$1.35.

CONSUMPTION claimed 165 and diphtheria 21 (out of 176) in Ontario in January.

THERE were 3,237 in-door patients treated in the Montreal General Hospital in 1905.

DR. JOHN GRANT GUNN, son of Dr. Gunn, Ailsa Craig, has located at Vittoria, Norfol County.

By the will of the late Mr. Edwin H. King, the Montreal General Hospital will receive \$100,000.

It is said New York people are behind a scheme to establish a large sanitarium at Port Arthur, Ont.

THE total deaths in Ontario in January, 1905, were 2,447, as compared with 2,216 in January, 1904.

ALL the externe staff of the Toronto General Hospital resigned in a body the last day of February.

THE Toronto School Board has voted to do away with the compulsory vaccination of school children.

WINNIPEG General Hospital attended to 353 patients during the week ending the 17th of February.

DR. S. MOORE, of Horning's Mills, has been appointed an associate coroner for the County of Dufferin.

THERE were 669 patients treated in the Winnipeg General Hospital in January. The deaths numbered 34.

FOR the month of January there were treated in the Victoria, B.C., Hospital, 165 patients; 87 were admitted.

THE net loss sustained by the Free Hospital for Consumptives, Muskoka, through their recent fire, amounts to \$3,474.03.

DR. J. W. STIRLING, Montreal, has been appointed to the chair of ophthalmolgy in the University of McGill.

DR. JAMES IRWIN CASSIDY, of Moorefield, Ont., has been appointed associate coroner for the County of Wellington.

THE out-door consultations at the Montreal General Hospital in 1905 numbered 44,504, being 5,108 more than in 1904.

THE Winnipeg Medical Society has placed itself on record that the marriageable age for females should be eighteen years.

MONTREAL has had 175 cases of typhoid fever since January 1st; 74 cases occurring in new wards recently admitted to the city.

ST. JOHN, N.B., medical men are interviewing the Legislature of New Brunswick for aid to erect a sanatorium for consumptives in that province.

IN Montreal, during the week ending the 17th of February, there were reported over one hundred cases of contagious diseases and one hundred and seventeen deaths.

LIEUT.-COL. A. CODD, principal medical officer, Military District No. 10, is retired, retaining his rank and being granted a pension.

DR. HARRY BROWNING, of Exeter, has gone to Copper Cliff, where he has taken a situation in the medical department of Creighton Hospital.

TYPHOID fever numbered 168 cases in Ontario in January. The deaths from this cause was 51. In Fort William alone there were 106 cases and 13 deaths.

DR. GOOD, of Winnipeg, delivered an address on "City Hygiene," before the Canadian Club of that city on the afternoon of the 21st of February.

DR. P. H. BRYCE, Chief Medical Officer of the Department of the Interior, has been West inspecting the Government hospitals in Vancouver and Victoria.

THE County of Perth, Ont., is considering the advisability of purchasing tents to rent to the consumptives of that county on the certificate of the county physician.

THE Colchester Medical Society met at Truro, N.S., on the 2nd of February. They passed a resolution that a fee of \$5.00 should be made for all life insurance examinations.

DR. R. W. BRUCE SMITH, Inspector for the Ontario Government, recommends the establishment of a provincial hospital for the insane in New Ontario, north of Lake Superior.

Two hundred and fifty-three patients died in the Montreal General Hospital in 1905, giving a mortality of 7.81, or 4.54, exclusive of deaths occurring within three days of admission.

VERDUN Protestant Hospital for the Insane, Quebec, admitted during 1905, 190 patients; 103 men and 87 women. The total number in the institution is 654; 343 men and 311 women.

DR. GEORGE H. MATHEWSON, Montreal, has been appointed oculist to the Montreal General Hospital, in succession to Dr. J. W. Stirling, who has taken the position in the Royal Victoria, rendered vacant by the death of Dr. Buller.

TORONTO is healthy. The number of cases of diphtheria in February was 59, as against 96 in January, and 111 last February. Of scarlet fever there were 9 cases, as against 48 in February last year.

DR. J. C. FYSCHÉ, a graduate of McGill, has been appointed Superintendent of the Montreal Alexandra Contagious Diseases Hospital. He is at present in training under Dr. McCallum, of the Boston City Hospital.

DR. AMBROS T. STANTON, son of Thos. Stanton, Esq., Pontypool, who is on the medical staff of one of the principal London, Eng., hospitals, has been appointed Demonstrator of Pathology. Durham is proud of her talented sons.

DR. C. K. CLARKE, Superintendent of the Toronto Provincial Hospital, will receive the degree of Doctor of Laws from Queen's University at convocation on the 12th of April. Dr. Clarke was for fourteen years Professor of Mental Diseases in Queen's.

THE Charles Alexander Memorial Fund in aid of the Montreal General Hospital, and in commemoration of Mr. Alexander, who took such a deep interest in the welfare of this hospital, has attained to the sum of \$200,112. About \$50,000 is still needed to complete the memorial.

THE Alexandra Contagious Diseases Hospital, Montreal, is rapidly nearing completion. The management will be in a medical board of three; one each from the Royal Victoria, General and Western Hospitals. The total subscribed and paid up to date is \$149,637.70. The building and equipment will cost \$250,000.

THE fourth annual meeting of the Governing Board of the Vancouver General Hospital was held in Vancouver on the 14th of February. The chairman, speaking after his address, stated the Building Committee had expended \$103,000 on the new hospital building, and that \$40,000 was yet wanted for the Nurses' Home, morgue, etc.

STAFF of Montreal General Hospital: Physicians, W. A. Molson, M.D., A. D. Blackader, M.D., F. G. Finley, M.D., H. A. Lafleur, M.D. Surgeons, F. J. Shepherd, M.D., George E. Arm-

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strong, M.D., J. Alex. Hutchinson, M.D., J. M. Elder, M.D. Gynecologist, F. A. Lockhart, M.D. Laryngologist, H. D. Hamilton, M.D. Other appointments to the medical staff of the hospital were: Dr. John D. Cameron, Assistant Gynecologist; Dr. R. H. Craig, Assistant Laryngologist; Dr. D. A. Shirres, Neurologist. Out-patient Physicians: Dr. G. Gordon Campbell, Dr. S. Ridley Mackenzie, Dr. C. A. Peters, Dr. A. H. Gordon, Dr. B. D. Gillies, Dr. C. P. Howard. Out-patient Surgeons: Dr. Kenneth Cameron, Dr. C. W. Wilson, Dr. E. M. Von Eberts, Dr. A. T. Bazin, Dr. A. R. Pennoyer, Dr. W. L. Barlow.

THE annual meeting of the Council of the College of Physicians and Surgeons of New Brunswick, convened at Fredericton, on the 21st of February, Dr. J. P. McInerney was elected President; Dr. Thomas Walker, Treasurer, and Dr. Stewart Skinner, Registrar.

ONTARIO nurses are seeking incorporation from the Ontario Legislature. They desire to be known as the "Graduate Nurses' Association of Ontario." They wish to prescribe courses of instruction and hold examinations and grant diplomas. The government of the body is to be vested in an Executive Council of fifteen, four of whom are to be medical men. ✕

JOHN F. HART, M.D., of Athens, has been appointed associate coroner for Leeds and Grenville; W. J. Chambers, M.D., of Tiverton, for Bruce County; G. H. Cowan, M.D., of Napanee, for Lennox and Addington, and J. B. Reid, M.D., of Tillsonburg, for the County of Oxford.

THE following bill has been engaging the attention of the legislators of British Columbia: "No person shall sell, expose for sale, or have ready for sale any patent medicine, proprietary medicine, nostrum or specific, intended for internal consumption by human beings, that contains chloral hydrate, ergot, morphine, opium, belladonna, or any of their compounds or derivatives, cocaine or any of its salts, acetanilide, sulphuric, sulphurous, nitric and nitrous acids, unless the box, bottle, vessel, wrapper or cover in which said patent medicine, nostrum or specific is put in is, conspicuously labelled with the word Poison, and with the name and percentage of the poisonous ingredients. No person shall sell, expose for sale, or have ready for sale, any patent medicine, proprietary medicine, nostrum or specific containing more than 10 per cent. of alcohol by weight, unless the

owner, compounder, proprietor, or vendor of such patent medicine, proprietary medicine, nostrum or specific shall have obtained from the Provincial Board of Health permission to employ more than 10 per cent. of alcohol in the composition of said patent medicine, proprietary medicine, nostrum, or specific."

THE President again desires to call the attention of members of the Ontario Medical Association to the annual meeting for 1906. As was announced some time ago, the meeting will be called at 8 p.m., on Monday, August the 20th, the evening preceding the inauguration of the British Medical Association's meeting, and will take the form of a purely business session. The prestige of the greater meeting to follow should not diminish the sense of responsibility of the members to their local society. Such important business as the closing of the business of this year and the intelligent preparation for a successful meeting in 1907 demands a wide and sympathetic interest in the welfare of the Association.

EXAMINERS at Manitoba Medical College: Anatomy, theoretical—Dr. Pullar and Dr. McKenty. Anatomy, practical—Dr. England, Dr. Elkin, Dr. Burrige and Dr. McKay. Physiology—Prof. Vincent, Dr. Prowse and Dr. E. W. Montgomery. Chemistry—Dr. Parker and Dr. Laird. Histology—Dr. Bell and Dr. Webster. *Matrica medica* and therapeutics—Dr. Devine and Dr. Field. Surgical anatomy—Dr. England and Dr. Davidson. Medical jurisprudence—Dr. Rogers and Dr. Sutherland. Bacteriology and pathology—Dr. Bell and Dr. Webster. Sanitary science—Dr. Douglas and Dr. O'Donnell. Medicine, theoretical—Dr. Jones and Dr. Simpson. Medicine, clinical—Dr. Macdonnell and Dr. Popham. Surgery, theoretical—Dr. Todd and Dr. Chown. Surgery, clinical—Dr. Blanchard and Dr. Chown. Obstetrics and children—Dr. MacCalmar and Dr. MacArthur. Gynecology—Dr. Grey and Dr. McLean. Ophthalmology—Dr. Smith. Otology—Dr. Good. C. M.—Dr. Hardle and Dr. Cunningham.

THE monthly meeting of the Medical Association of Vancouver, B.C., was held on the 12th February in the Board of Trade rooms. Dr. Underhill, President, was in the chair, and Dr. J. M. Pearson was Recording Secretary. Two questions of considerable interest to the public were dealt with, namely, the petition presented to the Hospital Board last week by doctors in the city, asking that staff appointments at the hospital be made

for a term of five years, instead of for life, and that the opinion of doctors be heard regarding appointments, and the matter of bringing legislation to bear on the vending of patent and proprietary medicines. The first of the two questions came up in consequence of the recommendation of the Hospital Board to the effect that the petition should be endorsed by the Association, or backed by a resolution of that body. The matter was discussed at some length last night, and a resolution was passed in line with the recommendation of the Board. The following resolutions were adopted, after hearing the report of the committee appointed with power to deal with the question: "Resolved, that the Vancouver Medical Society endorse the bill (copy of which follows, for the regulation of the sale of patent medicines, viz., that the exact drugs and their quantities be plainly written on the bottle, and also suitable directions when the drugs are dangerous, and the Society asks the Government to pass this legislation immediately. Resolved, that copies of this resolution be sent to members of the Government, to which will be added by your committee the reasons for the necessity of such legislation. Resolved, that the Vancouver Medical Society ask the Medical Council if it could not send a suitable warning note to each member of the profession regarding proprietary medicines that are equally as fraudulent as some patent medicines." The Association then adjourned.

INTERNATIONAL MEDICAL CONGRESS.—Arrangements are being completed with regard to this Fifteenth Congress, which meets in Lisbon, from the 19th to the 26th of April. The principal general addresses will be delivered by Sir Patrick Manson, London; Prof. Brissaud, Paris; Dr. Jose Maria Esquerdo, Madrid; Dr. P. Aaser, Christiania; Prof. Azevedo Sodre, Rio de Janeiro; Prof. Neumann, Vienna; Prof. Prince Jean Tarcharoff, St. Petersburg; Prof. E. von Bergmann, Berlin. The different nationalities are well grouped, and we observe that the delegates from Great Britain, Canada, Australia and the British colonies will have a common meeting place. As to the service of lodging, it will be in charge of M. Manuel Jose da Silva, Praca dos Restauradores, Palacio Foz, Lisbon, to whom may be addressed all correspondence on this subject. Applications for membership will be received until the hour of the opening of the Congress and during the Congress, but in order to secure reductions granted by railways and navigation companies it is necessary to give your name as soon as possible. All such correspondence may be addressed to the Secretary-General, M. le Professor Miguel Bombarda, Nova Esola Medica, Lisbon. Re-

garding the *fetes* and receptions, which will be given in honor of the members of the Congress, it is announced that there will be three general *fetes*, and there will probably be several receptions and dinners *de gala*. A bull fight, according to the old Portuguese way, will be organized at the expense of the Congress. The definite details will be published at a later date. We understand that a number of Canadians have already decided to attend the Congress. It is requested that any member of the profession in Canada who desires to join the Canadian Committee would at an early date communicate with Dr. A. Mc-McPhedran, or Dr. W. H. B. Aikens, of this city, who will be glad to furnish all available information.

THE Transportation Sub-Committee of the British Medical Association makes the following announcements as to fares, etc., for those attending the meeting at Toronto, August 21-25, 1906: Fares, Going Dates and Limits.—Domestic Business, Certificate Plan Arrangements; free return regardless of number in attendance. Passengers going rail, returning R. & O. Navigation Company, or *vice versa*, rate to be one and one-half fare. European Business: On presentation of certificate, to be prepared and signed by the Secretary of E. C. P. Association, and countersigned by the Secretary of the Canadian Committee, or the Secretary of the British Medical Association, one-way tickets to be issued at one-half lowest one-way first-class rail fare; round-trip tickets at lowest one-way first-class rail fare between all points in Canada. Rates to Pacific Coast subject to concurrence of T. C. P. Association. Steamship lines to advise Secretary what, if any, additional arbitraries are required. Dates of sailing, July 1st to September 30th, 1906, inclusive. Final return limit, September 30th, 1906. Extension of Time Limit.—On deposit with Joint Agent of Standard Convention certificates, issued from points in the Maritime Provinces, from points west of Port Arthur, and from points in the United States on or before August 28th, 1906, and on payment of fee of \$1.00 at time of deposit, an extension of time until September 30th to be granted. Joint Agency to be conducted in the name of G. H. Webster, Secretary, E. C. P. Association, will be kept open from August 21st to September 15th, 1906. Side Trips.—Side trip tickets to be sold from Toronto to delegates from the Maritime Provinces, from all points west of Port Arthur and from the United States, on presentation of validated certificate, or deposit receipt, at lowest one-way first-class fare for the round trip, to all points in Canada. Dates of sale, August 23rd to September 1st, 1906, inclusive. Return limit, September 30th, 1906. Usual

additional arbitraries *via* Upper Lake steamships to apply, viz., going lake, returning rail, or going rail, returning lake, \$4.25 going lake, returning rail, or going rail, returning lake, \$4.25 additional to be collected. Also usual arbitraries *via* St. Lawrence route, for delegates desiring to return by steamer on presentation of tickets to purser, viz., \$6.50 Toronto to Montreal; \$3.50 Kingston to Montreal. *Via* Northern Navigation Company, on lines where meals and berth are not included, the rail rate will apply; on lines where meals and berth are included, rate to be single fare plus meal and berth arbitrary.

THE thirty-eight annual report on the lunatic and idiot asylums of Ontario shows that there were 6,213 patients certified insane on September 30th, 1905, an increase of 632 for the year, during which 1,130 patients were admitted. On September 30th, 1905, the number of patients was 4,613. The total cost of maintenance for the year was \$760,204, a weekly cost per patient of \$2.32. Revenue from paying patients amounted to \$114,916.

A strong protest is once more registered against the commitment of insane persons to jail. It is pointed out that the word "asylum" in connection with the insane is becoming obsolete. Hospital is the proper name for institutions devoted to their care.

Next to York County, which furnished 250 lunatics last year, comes Middlesex with 63; Wentworth and Frontenac had 48; Carleton, 46; Leeds and Grenville, 45; Simcoe, 41, and Northumberland and Durham, 40. Of the total number of patients, 1,097 hail from York County, 351 from Middlesex, 280 from Wentworth, 253 from Simcoe, and 245 from Carleton.

As many as 643 patients have been in residence twenty years and upwards. There were 315 discharged cured during the year, one of these after twenty years. The number of deaths for the year were 343, a percentage of 5.97. Tuberculosis was the cause of 43. Senile decay and epilepsy were the next chief causes.

Of the occupations of insane persons the great bulk of them come from four classes. Housekeepers head the list for the period under survey with 5,434 cases; laborers follow with 4,680; farmers, with 4,368, and domestic servants, with 3,725. The enormous difference is apparent when it is noted that the next two classes are wives, with 650 cases, and carpenters, with 471.

Patients were given employment in the asylum to the number of 4,431, with an average number of 298 days for each patient.

Correspondence.

To the Editor of DOMINION MEDICAL MONTHLY :

DEAR SIR,—Like many other medical men who are not connected with any insurance company, I have had frequent cause to complain of these wealthy corporations obtaining valuable services without any remuneration for our time. During the last few years I have been throwing their long list of questions in the waste-paper basket. Now, however, I have an agreeable experience to report; for the first time in nearly thirty years of gratuitous services of this kind I was agreeably surprised to receive a cheque to pay me for my time in answering their letter, which I did cheerfully, fully and promptly. It may interest your readers to know the name of this company, which, as far as I am aware, is the only one in Canada to treat medical men honorably, viz., "The Royal." Although I did not know anyone connected with this company before, and have no other interest in it than the above, I intend to give all my life insurance to it in the future, and I trust that your readers may show their appreciation of this honorable treatment of medical men by throwing as much business in their way as possible. One of the companies, which has recently cut the examining fee of its medical officers down to three dollars, was able to pay its chief lay official a hundred thousand dollars a year for his services. The two or three hundred medical examiners for these wealthy companies dare not say a word, even if their fee were cut down to one dollar; but the remaining five thousand doctors could show their disapproval of this sweating process by using their influence in favor of those companies which treat their medical men honorably.

Yours truly,

MEDICUS.

Publishers' Department

OZENA.—Some three months ago a young lad, Master S., twelve years of age, was brought to my office with the request from his teacher that he be sent home. As he entered the room I was much impressed by the fearful odor from him. It was indescribable and permeated the entire room. Not having seen a case like this before, I made a careful examination for the cause. He was anemic, had difficulty in breathing, was somewhat emaciated and seemed poorly nourished. On questioning him I found that this condition had existed for some time (two months or more) the odor steadily becoming worse. He had been treated by physicians unsuccessfully in the meantime. As the rules of the Board of Health of this division limit me to simply a diagnosis, I pronounced the case from the odor, history and limited examination, a case of ozena of fetid form of atrophic catarrh with a possible necrosis or caries, and referred him to the nose and throat hospital of this city. His teacher and the principal meanwhile protested against his attending school and as I had no authority to send him home, the disease not being recognized as contagious, I advised that he be allowed a seat by himself. At the end of two weeks' time, not seeing what I would consider much of an improvement, I, on my own responsibility, gave him a Birmingham Douche and a small bottle of Glyco-Thymoline. In about ten days' time the odor was hardly perceptible and at the end of two months it had entirely disappeared. His general condition was remarkably improved as well as his sense of smell. The case was watched daily both by myself, the principal, and his teacher, who became much interested as the case progressed. The boy had not lost a single day at school, his sense of smell is completely restored, and his health has never been better.—*Edwin E. Hitchcock, M.D., N. Y. City.*

CHRONIC AND RECURRENT COUGHS AND THEIR TREATMENT.—In treating coughs we quite often encounter obstinate cases, which, no matter what combative measures may be instituted, will continue without abatement. Such cases are best classified as the Chronic Cough and the Recurrent Winter Cough. Both of these classes are extremely obstinate in their course and yield reluctantly to treatment. They are usually of long dura-

tion, and, while not, in themselves, directly dangerous, may become so by inducing emphysema and bronchiectasis.

In the great majority of chronic and recurrent winter coughs, the basic trouble lies in a low form of inflammation of the bronchial mucous membrane, especially that of the bronchioles.

In many cases I have used Codeia, but lately I have been having much more success with another derivative of opium, *i.e.*, Heroin. In comparing the results obtained from the use of these two drugs, I notice that heroin will not constipate the patient, nor will it have the stupefying effect characteristic of codeine. Another advantage possessed by heroin is that it is effective in young children, in very small doses.

I had been accustomed to prescribe heroin alone, but, about a year ago my attention was called to a preparation of that drug—Glyco-Heroin (Smith). Upon giving it a good trial I found that it gave me better results than obtained when heroin alone was given, and much more quickly. Glyco-Heroin (Smith) has one distinct advantage over plain heroin in that it can be given for a long time without ill effects, and in the class of patients in question this is, indeed, a most important feature. During the past year and a half I have treated a number of cases and recurrent winter coughs with Glyco-Heroin (Smith) and have obtained uniformly good results.

Example.—A. L. Salesman. Aged 28. I saw this patient early in the spring of 1903. He is robust and of good habits. He consulted me concerning a constant cough which had troubled him for over a year. It was usually worse in the morning and after meals, and accompanied by expectoration of thick mucopurulent matter. Sometimes blood-stained, and especially so after a severe paroxysm. This circumstance preyed upon his mind considerably—he thought he had consumption. I learned that he had had a severe attack of acute bronchitis during the spring of 1902 and had been coughing ever since. Physical examination excluded tuberculosis. The diagnosis was chronic bronchitis, sequential to acute. The patient was immediately put on Glyco-Heroin (Smith), and the same hygienic measures ordered as in Case 1. Here again the financial condition of the patient precluded change of climate. In addition to the Glyco-Heroin (Smith) the patient was given syrup of hypophosphites as a tonic. I did not see him again until last October. He then reported himself absolutely free from cough. He continued taking the Glyco-Heroin (Smith), and, during the present winter, has not experienced any return of the trouble. In this case a

complete cure was effected by means of quieting the cough and stopping the irritation of the mucous membrane, in this manner allowing the restorative powers of the body, aided by the tonics and good hygiene, to accomplish a cure.

Example.—Miss R. M. Aged 24. Teacher. This lady had been coughing ever since she was nineteen years of age. At that time she had an attack of rheumatism with a complicating bronchitis. After the acute condition moderated, she continued to cough, the cough being very annoying in character, spasmodic and prolonged. After each paroxysm she was left in a state of exhaustion. During the attacks she urinated involuntarily. On examination she was found to have chronic bronchitis, aggravated by an exceedingly irritable condition of the respiratory tract. The mere odor of cigar smoke was sufficient to induce a paroxysm of coughing. In treating this patient it was necessary to devote attention to the neurasthenia as well as the chronic bronchitis. She was placed on a diet and her mode of living regulated. Arsenic, strychnine and iron in pill form were given. For the cough, I ordered Glyco-Heroin (Smith). The improvement was marked and rapid. The general nervous condition became much improved and the cough grew much less severe and gradually lost its spasmodic character. At the present time it amounts to but little more than a "clearing of the throat." This case, more than any other, demonstrated the excellent properties of Glyco-Heroin (Smith). The quick relief afforded was surprising and no more gratifying to the patient than to me.—*Abstract of article by J. E. Alter, M.D.*

LATENT RHEUMATIC CONDITIONS.—It is during the spring months more particularly that the physician is called upon to treat patients, who though not ill enough to be in bed, are not at all well. Their appetite is capricious, they sleep indifferently, or even if they sleep soundly they are not refreshed, and in the morning they are almost as fatigued and ill at ease as was the case on retiring. Upon awakening there is frequently an aching sensation in the loins, sometimes in the lower limbs, which may partially wear off as the day progresses, but there is at all times a vague, undefined, uneasy, painful feeling. The symptoms are very much like those experienced in malaria, but the causes are entirely different and a different treatment is necessary. This condition arises from the fact that in the spring the eliminative functions do not present their usual activity owing to the torpor and locked-up secretions which have existed during the winter

months, when the skin neglects its duties and the kidneys are overworked. If the condition remains neglected the probable result will be sooner or later a pronounced attack of rheumatism or gripe in one or another of its forms. All that is needed to induce such an attack is a sudden change in the weather or the exposure on the part of the patient to cold or wet or to a combination of both. This is due to a latent rheumatic diathesis to which every adult is liable. The necessity of a powerful eliminant in every prescription for rheumatism and gripe is self-evident. While anti-pyretics and anti-periodics may slightly stimulate the excretions and relieve congestion, thereby controlling certain features of the disease, a complete cure cannot be expected until the poisons are thoroughly eliminated from the system and the diseased organs enabled to resume normal functions. In the treatment of all rheumatic, neuralgic, and grippy conditions, Tongaline, by promoting the absorptive powers of the various glands which have been clogged, and by its stimulating action upon the liver, the bowels, the kidneys and the skin, will relieve the pain, allay the fever, eliminate the poisons, stimulate recuperation and prevent sequelæ.—J R. Phelan, M.D., Oklahoma City, Okla., Editor *Oklahoma Medical News Journal*.

HAVE used your Resinol Soap and Ointment with much satisfaction. I have for years suffered at intervals with scalp itching, have used most everything with no avail until I tried a massage with the Ointment. The result was great, scalp easy, no dandruff, and hair ceases to fall out. I try to keep it on hand.—C. D. Driscoll, D.D.S., Paoli, Ind.

IN a paper on "Sexual Neurasthenia in Men," Dr. Arthur E. Mink, of St. Louis, Mo., says: "In the treatment of sexual neurasthenia the tonics, such as iron, arsenic, strychnine, quinine, gold and zinc, are of value in many cases. The most efficient, in my opinion, is Sanmetto. It seems to act directly upon the genito-spinal centre and improves its nutrition. Many cases, as I have said before, are remotely due to gonorrhea, and hence Sanmetto is doubly of value in such cases."

A PLEA FOR THE TABLET.—"In the first place, compared with pills, tablets have no insoluble coating, nor, when properly made, have they any insoluble excipient added to their composition. For example, Antikamnia Tablets are made by simple

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVI.

TORONTO, APRIL, 1906.

No. 4.

Original Articles.

IMPORT OF RELAXED ABDOMINAL WALLS IN DISEASE OF THE DIGESTIVE ORGANS.

BY JOSEPH E. GIBBS, M.D., VICTORIA, B.C.

Having spent considerable time during the past five years in the dissection of the normal pathological and comparative anatomy of the digestive system, together with fairly close observation of all cases of disease of these organs coming under my care during that time, I feel that the observations I shall present may be of some value as suggestions towards their more scientific treatment. I have purposely quoted considerably from well-known authorities, in order to show, by their own statements, although evidently not recognized by them, that at least the majority of diseases of these organs are dependent upon a simple mechanical derangement, the result of abnormal intra-abdominal pressure.

The natural sequence of events, reasoning analytically, not synthetically, I shall first state in order that we may the more readily follow the developments of the pathology.

We have then, 1st. Infection—as the exciting cause of pancreatitis, pancreatic calculi, cholecystitis, gall-stones, diseases of liver, gastric and duodenal catarrh and ulcers, etc.

2nd. The duodenum, as the point of origin of the infection from below the portal vein, as the source of infection from above.

3rd. Abnormal duodenum, as the normal duodenum is practically free from infection.

4th. Obstruction and stagnation, the necessary requirements for infection, as free drainage cures.

5th. The point of obstruction, being where the sup. mes. vessels cross the 3rd portion of the duodenum.

6th. Tension, upon vessels the cause of the compression as the duodenum is thereby gripped between the vessels and the post. ab. walls.

7th. The intestines, supplied by these vessels as the cause of the tension, their weight, irrespective of contents, being the sole factor.

8th. Insufficient normal support being reason for vessels having to support the weight.

9th. Abdominal walls, being normal support, must contain pathology, which is responsible for above conditions.

10th. The pathology of the abdominal walls is the result of the so-called predisposing causes of disease of these organs.

11th. Preventive treatment must be directed to condition of structures of the abdominal walls and similar tissues throughout the body during the course of and convalescence from these diseases.

12th. The serious nature of abdominal section for trivial causes, and the almost criminal nature of so-called "exploratory incision."

The fact of infection being the cause of disease of these organs and also that the infection is primarily of duodenal origin is so widely accepted that any comment would be superfluous, and I shall therefore limit the discussion of the four first points to quotations from a few well-known authorities.

Deaver, in Vol. III, p. 106, *International Clinics* of this year, says: "Pancreatitis, either acute or chronic, accompanies gall-stone disease in many instances, and for the reason that in both diseases the same factors operate. Infection and obstruction of the excretory ducts of the pancreas and biliary tracts are responsible for the lesions of those organs; again on page 107—

"It can be emphatically stated that gall-stones are always the result of precipitated salts and tissue debris following in the wake of bacterial infection, mild or severe in degree. Furthermore, the complications of chronic gall-stone disease, adhesions, ulcerations, fistulæ, liver and pancreatic disease, etc., are also due to infection."

Mayo Robson says, speaking on catarrh of the gall-bladder and bile ducts: "An extension from the duodenum is probably the usual cause, and as the common bile duct traverses the walls of the duodenum very obliquely it is to be expected that the narrow terminal portion of the duct will be the first to suffer, and be the seat of the primary obstruction. Chronic catarrh of the gall-bladder and ducts is the sequel of above, with dyspeptic symptoms, due to associated gastro-intestinal catarrh."

In discussing the etiology of pancreatitis, he says: "Pancreatitis is probably always a secondary disease, and usually dependent on infection spreading from the common bile duct or duodenum."

Ochsner, pp. 159, 161 of his work on clinical surgery, says of pyloric obstruction, cholecystitis and pancreatitis:

"It is plain that each one of these conditions can only be relieved by securing perfect drainage for the cavities involved, and that stomach surgery is instituted to a very great extent for the purpose of overcoming faulty drainage of this organ."

Mayo Robson further says: "Though well recognized, I think it has not been sufficiently grasped that the essential cause of peptic ulcer is of a septic nature, and in many cases the source of the trouble is oral. Even so, drainage by gastro-enterostomy cures, irrespective of condition of mouth, and therefore we are justified in stating that faulty drainage is undoubtedly the chief cause."

Moynihan, on p. 47 of his recent work on gall-stones and their surgical treatment, says: "The fact that the bacillus coli is the most common inhabitant of the gall-bladder and of gall-stones, suggests that an intestinal origin is the most likely, for this organism abounds in the intestine, *though it is not, as a rule, present in large numbers in the duodenum when in a normal condition.*

Opinion is now universally in favor of the view that it is the irritation of gall-stones that determine the incidence of cancer. Authorities also agree that old-standing gastric ulcers are responsible for the vast majority of cases of cancer of the stomach.

We have here then clearly demonstrated by the statements of eminent authorities that infection is the cause of diseases of the liver, gall-bladder, bile ducts and pancreas, also of ulcer of stomach, and it is evident that the point of great significance is that of (as stated by one eminent authority) the associated gastro-intestinal catarrh. Also another very significant statement is that *the duodenum in its normal condition is practically free from infection.* It is quite evident, even to the superficial

observer, that it is immaterial whether the infection is ascending, as stated above, or descending, viz., by way of the portal vein through the liver, the essential point necessary for infection of the tissues being stagnation of contents, the result of obstruction. We are then led to look to the duodenum, below the entrance of the pancreatic and common bile ducts, for the pathological lesion responsible for the above wide-spread infection. The exact location of this lesion I have demonstrated and have had demonstrated many times to my own satisfaction and that of others. Dr. Byron Robinson, of Chicago, first drew my attention to the condition some five years ago while doing post-graduate work there; he, so far as I know, being the first American surgeon to make a study of the condition. The departure from normal lying at the point where the sup. mes. vessels cross the horizontal portion of the duodenum and is due to compression of this part of the bowel between the vessels and the post. abdominal walls. I have seen this condition many times, post-mortem and otherwise, and was prompted to this report by the investigation of a very marked case which I examined in conjunction with Dr. Bolton. The subject was a young man of some 30 years of age, who had come under the treatment of Dr. Bolton some two or three days previously for tuberculosis of the lungs. His previous history was somewhat meagre, although we learned he had been living the life of a bachelor for a long time in a cabin alone, doing his own cooking, etc. For the last few months of his life he had been noticed standing on the street corners for hours each day, and was evidently taken up by some humane society and placed in the Royal Jubilee Hospital, where he died some two or three days later. The following day we made a post-mortem, the objective point being the lungs, as a slight discussion arose as to their condition, one medical man holding to the belief of there being an empyema, while the attendant believed there to be rather a fibrosis; however, the latter proved to be right. On opening the abdomen, nothing presented but an enormously distended stomach, reaching from ensiform cartilage to pubis, and from side to side of the abdomen, and above and to the right the duodenum presented distended to ten times its normal capacity. Upon raising the stomach the remaining intestines, small and large alike, were found to be absolutely empty. At this point one of the three medical men present remarked on the decided pyloric obstruction, and so content retired to congratulate himself upon his acuity of observation in things pathological. It required, however, but a second's examination to see that the pylorus would readily admit

the entire hand and arm. The point of obstruction was sought and was seen to be due to a tight band which produced enormous pressure of the bowel, between it and the post abdominal wall. This band contained, upon dissection, the superior mesenteric artery and vein, the tension upon which was evidently due to the prolapsed bowels, which were found at the very lowest point of the abdominal cavity and in the pelvis. The point of importance to be noted was the absolute emptiness of the bowel, it being very thin and ribbon-like and comparatively very light.

The condition of the viscera, above the obstruction, was next examined. The stomach and duodenum were distended with a dark grumous liquid, their mucous membranes thickened and showed undoubted evidence of long-continued irritation. The head and body of the pancreas were enlarged and hard with greatly distended ducts and showing a similar condition. The common bile duct, as also the cystic and hepatic ducts, were likewise enormously distended and presented marked thickening of their mucous membranes and walls, the liver was swollen and hard, the gall-bladder was at least five times its normal size, and presented several large pockets, some of which contained enormous stones. Lack of time prevented further examination, which I greatly regretted, as I had never before, nor have I since, seen such marked pathology. Before this I had seen several such cases, only not nearly so well marked, and since have seen several others.

Not later than a few months ago, in company with Dr. Fraser, whom I assisted in doing a post-mortem, did I see the same condition in a lady 53 years of age, who had died from acute alcoholism. Dr. Fraser remarked at the time the condition of the large, flabby stomach, and when I pointed out the condition of the duodenum, which was at least twice the normal size, and the cause of the trouble, he remarked: "Gracious, what a weight that band is!" as he lifted it on his hand.

I mention these two cases as they were examined by two local men besides myself; and although the same condition has been written on by others, yet the importance of it pathologically has evidently been appreciated by but very few.

It is very interesting to note that Dr. Ochsner, during his operative work, has noted a similar condition of obstruction, for in the 1905 February number of the *Annals of Surgery*, in a discussion on gall-stone surgery, he remarks: "Upon opening the abdomen it would be found that the duodenum, at its upper end, was greatly distended, and that the pylorus was wide open. When one lifted up the transverse colon and examined the small

intestine, the jejunum, where it passes through the mesentery, was contracted. It was empty, while the duodenum was open. Enlarged glands were found along the duodenum. This could only be explained in this manner: that there was a physiological obstruction opposite the entrance to the common duct into the duodenum, and for that reason the duodenum was distended with gas above and was closed lower down. In a large majority of these cases he had found either gall-stones or sand in the gall-bladder, and furthermore, in many cases he had found pancreatitis, due to physiological closure at a point behind the stomach, a little below the entrance to the common duct." He would like to have other surgeons observe this condition in operating, *i.e.*, whether in many cases they found a dilated duodenum, a wide-open pylorus, and a contracted jejunum down below. This statement is exceedingly interesting, as it shows the location of the obstruction to be practically the same as I have already given, with the explanation of its being a physiological obstruction—whatever is meant by that. Dr. Ochsner has since explained the nature of this obstruction. He has demonstrated the existence of a sphincter muscle surrounding the duodenum at a point midway between the opening of the common bile-duct and the duodeno-jejunal junction. This, however, being of the nature of a sphincter, it is difficult to conceive how normally it could act as an obstruction. On the other hand, the obstructive effect of pressure by the sup. mes. vessels on the third portion of the duodenum can be readily seen and demonstrated, by either pressure from above, by bands or corsets, or by tension from below, as by adhesions or enteroptosis, which latter in itself is amply sufficient to produce considerable pressure and obstruction even when the bowels are absolutely empty, as I have seen many times.

The fact of the matter is the only obstructing element that can be shown to exist in this region, physiologically or otherwise, is the sup. mes. vessels with their immediate surrounding mesenteric tissues.

We have here demonstrated the cause of the obstruction to be the band above referred to, and this in turn to be due to the weight of the prolapsed intestines. The next question naturally arises, Why do the intestines prolapse? Evidently from weak supports. The mesenterics are not the natural supports of the intestines, but as Byron Robinson has so ably put it, they are but "Neuro-vascular visceral pedicles." True they offer considerable support, and the degree of that support is readily demonstrated in that condition of relaxed abdominal wall, termed by

the Germans, "hanging belly," where, on opening the abdomen we find invariably, in my experience, well-marked visceral ptosis, with the various pathological conditions which necessarily follow in its train. Upon close examination of the structure of the abdominal walls they will be found with elongated and separated muscular and elastic fibres throughout all layers, the lines alba will be very much widened, thinned and relaxed, the entire abdominal wall offering but comparatively poor support to the contained viscera.

Any one doing careful post-mortem work cannot but verify the correctness of the above findings, but the great source of error into which those who do post-mortems, and those who write for the directions of others, have fallen, is that they have completely ignored the belly walls as a factor in disease, and have consequently by one grand sweeping incision from ensiform to pubes alighted upon the poor innocent viscera and accused them of the entire sin, much as do a good many respected citizens in laying upon the shoulders of the devil the blame for misdemeanors for which they and they alone are responsible.

For one moment, let us consider the normal structure and formation of the abdominal wall and then ponder over the calamity which has befallen the individual with a belly wall as above described.

Taking into consideration the complete muscular boundaries of the abdominal cavity, with the variety of directions of the muscular fibres and the fibro-elastic tissue found in their sheaths and in the remaining deep fascias of the part, we cannot look upon the abdominal wall in its entirety in any other light than that of a highly contractile and elastic apparatus, admirably adapted by its powers of distension and contraction for accurately fitting, as it were, its contents. In short, as Byron Robinson says, it is the function of the abdominal wall to contract and dilate in the volume changes of the abdominal contents, as well as the volume changes in the thorax. And to keep up a vigilant guard, a vigorous but delicate elastic regulation of abdominal visceral contents. It is the elastic spanning of the abdominal walls that maintains the delicate visceral poise. Gray (anatomy), refers to the same function: "When at the end of respiration the diaphragm relaxes, the abdominal walls return to their normal position; they therefore push up the viscera again, and these pressing on the diaphragm cause it to resume its ordinary position of rest."

We therefore see the abdominal wall to be the main support of the viscera, preventing prolapse and maintaining them in their

normal relations, and therefore its pathology explains why such conditions as pregnancy, typhoid, chlorosis, tuberculosis, etc., are pre-disposing causes of gall-stone gastric ulcer, etc., *i.e.*, by causing a weakening of the muscle fibres and elastic tissues either from stretching, as in pregnancy or intra-abdominal tumors; or as a general debilitating effect as in typhoid fever, influenza, tuberculosis and other prolonged constitutional diseases; and the treatment is therefore apparent, *i.e.*, the restoration of the normal structure and function of the parts. The details of application I shall leave to your consideration.

It is interesting at this point to analyze the causes of two or three of the more common diseases of the digestive organs, as given by eminent authorities.

First taking Mayo Robson's classification of the etiology of gall-stones:

I. EXCITING CAUSE.

(a) Infection.

2. PREDISPOSING CAUSES.

(a) Age—

Under 20 years,	2.4 per cent.	} Time of life in women when effects of child-bearing on muscular wall would become evident; also 50 years and upwards when muscular system in general has lost tone.
20 to 30 "	3.2 "	
30 to 40 "	11.5 "	
40 to 50 "	11.1 "	
50 to 60 "	9.9 "	
60 and over,	25.2 "	

(b) Sex—

Women, 20 per cent.	{ Pregnant, 90 per cent. which produces over-stretching. Non-pregnant, 10 per cent., corsets, etc.
Men, 4 4 per cent.	

Debilitating diseases, etc.

(c) Habits—

Want of exercise whereby the gall-bladder is unaided in its expulsive efforts by the contraction of the abdominal muscles. (Significant).

(d)

Limited supply of nitrogenous food with bile-salts diminished and a resultant proportion of cholesterin.

His classification of the etiology of pancreatitis is also suggestive, viz.:

I. EXCITING CAUSES.

(a) Infection. Depending upon stagnation and obstruction.

(b) Irritation. Result of infection.

2. PREDISPOSING.

(a) Obstruction in the ducts from—

Duodenal catarrh,	} All due to—
Ulcer of duodenum,	
Pancreatic calculi,	
Gall-stones,	
Cancer of head of pancreas.	
	Infection,
	Stagnation,
	Obstruction.

(b) General ailments, viz.:

Typhoid,	} Causing general debility, and therefore loss of
Influenza,	
Mumps, etc.	
	muscular tone.

(c) Anatomical peculiarities.

Here he evidently refers to anatomical peculiarities in the organs themselves, such as the common bile-duct passing through the head of the pancreas, narrowness of duct at entrance to duodenum, etc., all of which are factors, but of secondary consideration.

(d) Hæmorrhage into gland.

Irritation is usual cause and generally from infection—which is at present generally held to be cause of hæmorrhagic pancreatitis.

(e) Injury. Result obvious.

(f) New growth. Results of irritation from infection.

(g) Fatty degeneration of blood vessels.

OSLER'S ETIOLOGY OF ULCER OF STOMACH.

- | | |
|-----------------------------------|---|
| (a) Female sex, 2:1. | } Relation of abdominal walls from distention by pregnancy, ovarian tumors, lack of exercise of muscles, Waist bands, corsets, etc. |
| Other authorities as high as 5:1. | |
| Externally, | |
| (b) Tuberculosis. | Evident asthenia. |
| (c) Anæmia and chlorosis. | Lowered muscular tone. |
| (d) Copræmia. | Same. |
| (e) Post-puerperal state. | } Over-stretching of abdominal walls, and loss of tone. |
| (f) Neuropathy. | |
| (g) Hysteria. | Deranged nerve supply to muscular system. |
| | Same. |

All the above conditions obviously produce general muscular weakness, and the majority of the conditions effect especially the abdominal muscles and elastic tissues. Pressure from without will also force the intestines distalward and produce tension on the sup. mes. vessels. Plainly, too, in order to produce the above results, it is not necessary that the intestines should prolapse to any great extent, but only that the abdominal walls should become deranged to an extent sufficient to throw a part of their support upon the mesenteries, thus causing tension on the vessels, the degree depending upon extra weight to be supported by the mesenteries.

Before closing, it might be well to refer to that most contagious surgical procedure, viz., abdominal section. From the foregoing it is apparent that we cannot be too careful in the repair of the belly wall wound, and especially in the proper adjustment of the supporting elements, viz., the muscle sheaths and deep fascias. But more especially should we denounce in no uncertain manner that too-prevalent so-called surgical procedure, "Exploratory Incision," instituted, no doubt, for the convenience of ignorance and indolence. The seriousness of the procedure is evident from the statement of Glenard and Albrecht, which follows, viz.: "That as after celiotomy the intra-abdominal pressure is lost, there is general enteroptosis, and the traction exerted upon the superior mesenteric artery, with its accompanying bundles of connective tissue, compresses the duodenum and causes stagnation of stomach contents."

We have here then also the ideal condition for the widespread infection of the entire digestive system. Finally, then, after such evidence as this, should we not be more inclined to render unto the viscera the things that belong to the viscera, and unto the belly wall the things that belong to the belly wall? Thoracic and pelvic diaphragms are also included in abdominal walls.

Clinical Department.

A Case of Hypertrophic Cirrhosis of the Liver, etc. BY JOHN WELZMILLER, M.D., in *Post Graduate*.

P. A., male, aged 38 years; occupation, maltster; born in Germany. Has resided in United States 21 years.

Family History.—Father died of dropsy at 75 years of age. Mother died of phthisis. Has six brothers and two sisters. Three brothers dead—two died of phthisis and one cause unknown. The two sisters are living and well. All the other brothers are in good health.

Previous History.—Never had diseases of childhood; was always healthy up to 22 years of age when he had gonorrhea. Later in the same year had a "chancre" followed by sore mouth and throat, but had no rash or alopecia. Was treated for chancre locally for two weeks. Has always indulged in intoxicating beverages, sometimes to the extent of 100 glasses of beer daily. He has never taken much whiskey. Says he has continued this habit for 12 or more years. Has always indulged freely his sexual appetite. Has had frequently slight attacks of articular rheumatism. First noticed trouble with his heart eight years ago. Was walking and suffered with shortness of breath. Six and a half years ago he noticed that his abdomen was increasing in size, legs swelling during the day, and respiration becoming more and more difficult. Was confined to his bed for nine weeks, during which time paracentesis abdominalis was performed and about two quarts of fluid withdrawn. He returned to work, but soon had to give it up. Shortly after this he came to the Dispensary.

Present History.—Complains of dyspnea, edema of legs, enlarged abdomen, pulsating vessels in neck, and a sticking pain in left side while walking. Is unable to walk more than two blocks at a time. Appetite fairly good, some flatulence after eating; bowels constipated.

Inspection.—Skin somewhat jaundiced; conjunctivæ yellow; in fairly good state of nutrition; external hemorrhoids; pulsating jugulars; abdomen distended and legs edematous to knees; respiration labored; heaving precordia.

Palpation.—Heart, apex beat in fifth interspace and near nipple line; no thrill.

Liver, left lobe enlarged to two inches of umbilicus. Right lobe extends two fingers' breadth below ribs. No pulsation. Spleen not enlarged.

Percussion.—Lungs, negative.

Heart, dulness extends nearly to nipple line, and half an inch to right of sternum.

Liver, as determined by palpation, considerable ascites demonstrated by succussion.

Auscultation.—Lungs, Negative.

Heart, systolic murmur at apex and transmitted into axilla and angle of scapula.

Urine shows slight trace of bile. No casts.

Patient was tapped by Professor Burt in his clinic and two gallons of fluid withdrawn. Hydrogogue cathartics and cardiac tonics were administered and ascites failed to reaccumulate. His strength increased and he was able to go about selling cutlery.

To exclude syphilis as a possible cause for his liver, a course of mercury and potassium iodid was given for three months. No apparent change in the size of his liver followed.

About three years ago his liver began to pulsate, and the right lobe increased considerably in size. Since then he has accumulated considerable ascites and other manifestations of disturbed compensation have occurred frequently, but nearly always cleared up under active catharsis. Paracentesis abdominalis was required only three times in six years.

PHYSICAL EXAMINATION.

Oct. 20, 1905. *Present Condition.*—*Inspection.*—Color good, and in fairly good state of nutrition. Conjunctivæ natural. Pulsating jugulars. Abdomen somewhat distended. Ankles edematous at night. Apex beat not seen.

Palpation.—Heart, heaving precordia; apex beat in sixth interspace just outside of nipple line. No thrill.

Liver, pulsating, with right and left lobes extending to one inch from umbilicus.

Spleen, enlarged, extending to one inch from left iliac crest, and to anterior axillary line.

Stomach is considerably dilated.

Percussion.—Heart, dulness nearly one inch outside of nipple line and one inch to right of sternum.

Liver, same as determined by palpation.

Lungs, dulness extends upwards nearly to inferior angles of scapulæ.

Auscultation.—Heart, no murmurs heard at base. Three are heard at apex. A systolic soft blowing murmur, somewhat musical at times, transmitted into axilla.

A presystolic murmur heard about two inches above and inside of apex, limited to a radius of two inches.

A faint systolic murmur just inside of apex and diffused over region of base of sternum.

Lungs, respiratory note very faint posteriorly corresponding to area of dulness obtained by percussion.

Foreign Body in the Lung, Report of a Case. BY FRANCIS E. FRONCZAK, A.M., M.D., Buffalo, N.Y.

On the sixth day of July, 1905, I was called to see a child about 8 years old, who was said to be choking. The little patient, a girl, was in bed, somewhat cyanotic and breathing with considerable difficulty, about 32 times per minute, and coughing almost continually. This attack, as described by the mother of the girl, was quite sudden, the child being perfectly well a few hours before. On examination I found the throat to be perfectly clear and absolutely normal in every respect. On percussion of the chest the right lung gave a dull sound; on auscultation there were found many rales on the right side of the chest,—the left having no abnormal signs of any kind. The elevation of temperature was very slight. The child denied swallowing or aspirating anything, though I suspected some foreign body either in the bronchus or the lung. Removal to the hospital was proposed but declined. I saw the child several times, but there was no change in the condition, the physical signs remaining the same as on my first visit. The rales, though, were very much in evidence, so that they could be heard without the stethoscope.

Two months afterward, that is, on September 12, the girl had a very violent fit of coughing and after some time coughed up a melon seed, somewhat decayed. I learned later that on the day this girl became ill, she was eating a melon and presumably aspirated a seed which at times threatened her life. The fits of cough stopped almost immediately, the rales disappeared within a few days, and the child, who was losing both color and weight, began to recover lost ground, and at present has the appearance of a perfectly healthy school-girl.

The points which interested me in this case were: the length of time the foreign body lodged in the lung, over two months; the sudden development of the symptoms and their speedy disappearance when the object was dislodged from the lung, where, I believe it was located; and lastly, it taught me a very useful lesson,—namely, not to make a prognosis too grave. I told the mother after the child denied swallowing or aspirating anything, and not improving under treatment, that she had probably developed some disease of the lung, tubercular, and that she would not recover. I was wrong in both of my deductions and diagnoses, of which fact I am glad. It is human to err, but medical men are not often forgiven their errors.

A Case of *Maladie de Tic Convulsive*. JAMES JOHNSON in the
British Medical Journal.

The movements of the patient, a man twenty-eight years old, were quite different from those of any ordinary case of chorea. The involuntary muscular movements were well marked, affecting chiefly the brachial muscles of the face and arms. The patient often raised his hand, blowing at the back of it as if there were a piece of soot on it. He also spat on it in a convulsive manner. He sometimes suddenly jerked his head to one side without raising his hand, and then spat convulsively on the floor or on any one near and would often bark, and at times say "blast," or "dam," in quick succession. These words were frequently indistinct. At table he beat a tattoo on his plate with his knife or fork or spoon. When rising from a chair he shuffled his feet before commencing to walk, as if preparing for a step dance. He was greatly attracted by lights in the street at night. Not only did he then indulge in his curious habits, but as he walked he turned his head round to keep his eyes fixed upon the light. At times he staggered as if he were drunk. He had imperative ideas which forced him to execute certain movements. He felt compelled to satisfy that impulse. The movements were always worse when the patient was busy. Otherwise the patient was in perfect health, always attending to his business.

Therapeutics.

Treatment of Whitlow.

Every kind of acute inflammation of the fingers is called whitlow, says Prof. Reclus, whether it be seated in the skin, under the skin, in the sheaths of the tendons or in the bones. To each of these different situations corresponds a clinical variety, and thus we have superficial whitlow or phlyctenular, which does not go beyond the papillæ of the derma. The subcutaneous whitlow can succeed the superficial form, and was called shirt button whitlow by Velpeau. This variety is extremely painful, the patient is deprived of sleep and the slightest pressure on the part caused excruciating agony. The finger is swollen and of a dark red. The pulp is hard and remittent by distention of the pus, contrary to what is observed in other regions where fluctuation generally reveals the existence of purulent matter. The pulp of the healthy finger always presents a fluctuating sensation.

Whitlow of the sheaths of the tendons is quite as painful as the last variety and particularly grave, as the function of the organ is generally compromised; it is caused by direct inoculation, a penetrating wound, but it can also follow superficial inflammation, which, by the lymphatics, reach the sheaths. The infection, where the thumb or the little finger is affected, can be propagated to the palm of the hand; for the other fingers it is arrested at the base, as the sheaths terminate in culs de sac at the articulation of the phalanges with the metacarpal bones.

This kind of whitlow of the sheaths can become an osteo-periostic whitlow, but sometimes the whitlow is osteo-periostic from the beginning.

The causes of the four varieties of whitlow are almost always the same; inoculation of germs in the different tissues of the finger by small punctured wounds, produced by splinters of wood, rusty nails, etc.

When the slightest wound occurs in the finger, it should be washed in very warm water and plunged in a bath of 122°F., and this treatment continued if the finger shows signs of inflammation. However, if it becomes swollen, pulsatile and painful, whitlow has set in and the only treatment is that of the bistoury.

The operation is very painful as everyone knows, and always superficial and incomplete when attempted without anesthetics. Surgeons, however, do not care to employ chloroform for such a small operation and have tried local anesthesia by means of refrigerating mixtures, ether or chloride of ethyle spray, ligature of the base of the finger with an elastic band, etc.; but all these

applications are of themselves more or less painful and do not remove the sensitiveness of the deep tissues.

This being the case, M. Reclus would not hesitate to employ chloroform if Stovaine, as a local anesthetic, did not give marvellous results. His method of proceeding is as follows—with an ordinary subcutaneous syringe he injects a solution of half per cent. of Stovaine into the base of the finger under the skin, and leaving the needle *in situ* he repeats the injection three or four times, until the skin whitens, then injects another syringe in the four sides of the finger so as to surround it with a kind of ring of the anesthetic solution. In a few minutes the finger is rendered completely insensible and the operation can be done in the easiest manner, the patient looking on with the greatest composure if not with indifference. After the operation the finger is plunged for half an hour in a warm solution of oxygen water reduced to six volumes. After the bath an antiseptic ointment is applied, and the cure is complete in seven or eight days.—*Medical Press*.

Sunstroke.

There are certain conditions which are necessary to induce sunstroke: they are a disordered state of the general health, overtaxing of the stomach with improper food or an overindulgence in alcoholic beverages. The laborer who is exposed to the direct rays of the sun need not fear sunstroke provided he is not in a weakened state or has not overtaxed his system with an excess of alcohol.

Sunstroke usually follows those who are exhausted by excessive strain due to overwork, so that a prime factor is to have all those people who are exposed to the sun live in a very rational manner. They must have sufficient sleep so that the nervous system is not overtaxed. We can, therefore, include what has just been said under the head of preventive measures.

Headache is usually an early symptom and should never be neglected in summer. The slightest giddiness or dizziness should be looked upon as an early symptom of a possible sunstroke if the person so suffering is compelled to work and be exposed to the sun. So much for the direct action of the rays of the sun. Not infrequently we have cases in which a similarity of symptoms, such as headaches or giddiness, vomiting and general prostration exist in people who have worked indoors or even in people who have worked at night in hot places near ovens; for example, bakers or moulders, or firemen working in the hold of a ship. In such people it is simply a question of exposing the body to extreme heat and causing thereby general prostration.

When these cases are found nothing is better than an icebag to the head and a cold plunge or shower for the body as a general

stimulant. A mustard foot bath will usually rouse the circulation. If there is violent throbbing of the temples then one or two leeches applied will sometimes relieve this condition.

Hot coffee, cracked ice or several drops of aromatic spirits of ammonia are valuable cardiac stimulants. If very high fever continues then a cold colon flushing by the use of several quarts of cool saline solution will reduce the temperature effectually as well as stimulate metabolism. For thirst, iced tea, buttermilk, water ices and ice cream may be liberally given.—*Dietetic Gazette*.

The Treatment of Typhoid Fever at the Roosevelt Hospital.

Thomson, in the *Medical News* of March 25th, 1905, details his experience with this disease and advises that with the first sign of dryness at the tip of the tongue, the oil of turpentine in 15- to 20-minim doses be given in mucilage every three hours till the tongue is moist again.

When cardiac weakness develops, alcoholic stimulants are given in the form of whiskey. The writer objects to repeated small doses, such as half an ounce, and much prefers an ounce at a time every three hours, given after milk. At first alcohol should be given only after midnight, then, as the fever continues, in the evening, and then in the afternoon. It is better to omit it in the forenoon, for that is the natural period of lessened fever and prostration. The secret of giving alcohol is not to look upon it as possessing any continuous sustaining power, but only that of a temporary stimulant for times of prostration, and hence the dose should be large enough to produce stimulation.

Strychnine is very commonly regarded as a needed cardiac stimulant in this affection. Its routine and persistent administration is mischievous, and it is well to suspend it every few days, and note the effect. Occasionally in pronounced cardiac debility the writer prescribes it in combination in a pill of

- R Strychnine sulph., gr. ss ;
Caffeine citrat., grs. xxxvj ;
Sparteine sulph., grs., xv ;
Ext. taraxaci, q. s.

M. Div. in pilul. xx. S. : One every three hours.

Much the most certain of all cardiac stimulants, however, is camphor given subcutaneously in 7½-grain doses dissolved in 20 minims of sterilized almond or olive oil. The author has seen it succeed in conditions of collapse in typhoid, as well as in pneumonia, when every other heart stimulant had failed. It may be repeated once an hour in urgent cases, or once in three hours.—*Therapeutic Gazette*.

Gelatin in the Treatment of Aneurysm.

At the meeting of the Academy of Medicine, Paris, held on April 11th, M. Le Dentu reported a successful case of popliteal aneurysm treated by injections of gelatinised serum, a method which was introduced by M. Lancereaux and M. Paulesco. Measures tending to occlude the artery, such as ligature above the sack or extirpation of the sac, are, in the case of a popliteal aneurysm, peculiarly prone to be followed by gangrene. M. Le Dentu's patient was a man, aged twenty years, who suffered from a traumatic popliteal aneurysm. During a period of two months he received seven injections of a serum containing 2 per cent. of gelatin in quantities of 200 grammes at a time. The injections were made in the gluteal region. After the second injection the pulsation in the sac had disappeared, and at the end of two months the cure was complete. The method is simple and, if care be taken to sterilise the gelatin by exposing it to a heat of 115°C ., so as to remove any risk of tetanus infection it may be said to be free from danger.—*The Lancet*.

The Osmic Acid Treatment of Tic Douloureux.

Dr. W. Payne Babcock, at the March 8th meeting of the Philadelphia County Medical Society, reported a case of trifacial neuralgia of extreme severity. The case was of thirty-five years standing, the patient having undergone eight operations in that time, two of them being attempts to remove the gasserian ganglion. Nine months ago Dr. Babcock injected a two per cent. solution of osmic acid, under cocain anesthesia. The patient, a man, has since gained thirty-five pounds, with complete revolution of his physical condition.

THE examination for tubercle bacilli in the urine by the ordinary method of staining, is not decisive by any means, even if the bladder has been catheterized and differential stains for smegma bacilli have been employed. Numerous examinations with the aid of these procedures must be made, and even then the diagnosis is only a presumptive one. The only sure test is by injecting a large quantity of the sediment into a guinea-pig.—*American Journal of Surgery*.

Proceedings of Societies.

SEVENTY-FOURTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, TORONTO, AUGUST 22, 23, 24, 25, 1906.

ABSTRACT OF MEMORANDUM FOR OFFICERS OF SECTIONS.

Meetings of Sections.—The Sections will meet on Tuesday, Wednesday, Thursday and Friday (August 21st, 22nd, 23rd, and 24th), at 9.30 a.m., adjourning at 12.30 p.m. each day.

Sectional Committee of Reference.—The President, Vice-Presidents, and Secretaries of each Section will form a Committee of Reference, and shall exercise the power of inviting, accepting, declining, or postponing any paper, and of arranging the order in which accepted papers shall be read.

Guests.—Papers by guests will be presented upon invitation. If the Committee of Reference desires to invite persons to read papers in the Section who are not eligible to become members of the Association, their names should be submitted for the approval of the Council. If it is desired to ask any such persons to attend the meetings of the Section and take part in the discussions, a general permission to issue such invitations should be obtained.

All papers read are the property of the British Medical Association, and may not be published elsewhere than in the British Medical Journal without special permission.

Discussions.—Secretaries are requested to communicate to the General Secretary a preliminary statement of the arrangements made for the discussions in the Section, to be laid before the Council at the earliest possible moment. This should consist of a statement of the subjects selected, together with the names, if possible, of the gentlemen who have undertaken to open the discussions.

Papers.—The offer of a paper should not be accepted on its title alone, and save under exceptional circumstances no paper should be accepted for reading until it has been sent to the Secretaries.

Secretaries are requested to communicate to the General Secretary of the Association, 429 Strand, London, W.C., not

later than June 15th, a complete list of papers approved and accepted for reading.

It is suggested that the Secretaries resident in the United Kingdom should collect papers from members on this side, and the Secretaries in Canada should deal with all papers in the Dominion and the United States.

Only titles of papers which have been accepted, and which may be reasonably expected to be read, should be included in the programme of Sectional proceedings.

Offers of papers ought not to be accepted in excess of the number likely to be read. Failure to observe this condition leads to many inconveniences and gives rise to complaints of unfair preference.

Report in the "British Medical Journal."—A report of the actual proceedings of the Section will be published in the *British Medical Journal* and in any communication addressed to persons who offer papers to be read in a Section, two things should be made quite clear:

(1) That papers read are the property of the British Medical Association, and cannot be published elsewhere than in the *British Medical Journal* without special permission.

(2) That the authors of papers not read have no claim for the publication of their papers in the *British Medical Journal*. Papers cannot be "taken as read." If they are not read they form no part of the proceedings of the Section.

Secretaries are requested to co-operate in preparing the report of the proceedings of their Section for publication in the *British Medical Journal*, with the reporter of the *British Medical Journal* appointed to the Section, and to hand to him all matters for publication for transmission to the Editor of the *British Medical Journal*, 2 Agar St., Strand, London, W.C.

The attention of authors should be particularly directed to the time limit (see below), and the text of papers submitted for publication in the *British Medical Journal*, as part of the report of the Section should represent what is actually read to the Section.

It is important that each author should hand the text of his paper in proper form for publication to one of the Secretaries of the Section immediately after it is read. It should be made clear that neglect to comply with this request may result in the omission of the paper in question from the proceedings of the Section subsequently published in the *British Medical Journal*.

Time Limit.—The attention of the Council of the Associa-

tion has been called to the non-observance by readers of papers of the rule as to the time limit, which is as follows: "No paper must exceed fifteen minutes in reading, and no subsequent speech must exceed ten minutes." The attention of Presidents and Secretaries of Sections is particularly requested to this rule.

Honorary Local Secretaries,

DR. F. N. G. STARR,	} The Medical Laboratories, University of Toronto, Toronto, Ont.
DR. D. J. GIBB WISHART,	
PROFESSOR J. J. MACKENZIE.	

SASKATCHEWAN MEDICAL ASSOCIATION.

The first regular meeting of the Saskatchewan Medical Association was held at the City of Saskatoon on March 14th and 15th, 1906. The draft of the Constitution and By-laws prepared by the Executive Committee was read and adopted. A draft of the new Medical Act was presented and unanimously endorsed by the members of the Association. Resolutions were passed memorializing the Provincial Government as to the necessity of enacting a Public Health Act at the coming Session of the Legislature, and also to adopt measures for the prevention of tuberculosis within this Province.

A resolution was passed memorializing the Dominion Government as to the necessity of checking the spread of tuberculosis among the Indians on the Government Reserves and among Indian school children.

In the evening of March 14th, a banquet was tendered to the members of the Association by the local Medical Society. A most enjoyable evening was spent, the whole affair reflecting much credit on the members of the local Medical Society.

At the evening session of the second day, several papers and addresses were given on Medical and Surgical subjects by Dr. M. M. Seymour, Regina; Dr. W. Henderson, South Qu'Appelle, and G. A. Charlton, Regina. The papers were freely discussed and will be published, together with the Constitution and By-laws, in the first number of the *Saskatchewan Medical Journal*.

The following members were elected for the ensuing year:

Hon. President, M. M. Seymour, Regina; President, J. W. Kemp, Indian Head; 1st Vice-President, T. C. Spence, Prince

Albert; 2nd Vice-President, H. Eaglesham, Weyburn; Secy.-Treasurer, G. A. Charlton, Regina; 1st Mem. Executive Committee, A. B. Stewart, Rosthern; 2nd Mem. Executive Committee, A. W. Allingham, Broadview; 3rd Mem. Executive Committee, C. M. Henry, Yorkton.

STANDING COMMITTEES:

Committee on Credentials.—Wm. McKay, Saskatoon; W. R. Sparling, Battleford; A. R. Turnbull, Moose Jaw.

Committee on Public Health.—A. C. McKean, Rouleau; P. D. Stewart, Saskatoon; J. V. Connell, Indian Head.

Committee on Legislation.—H. E. Monroe, Saskatoon; H. G. Nyblett, Abernethy; D. Low, Regina; J. R. Bird, White-wood; A. W. Allingham, Broadview.

Committee on Publication.—Wm. Elliott, Wolseley; A. G. Denmark, Langenburg; R. G. Stevenson, Moosomin.

Committee on By-laws.—J. A. Deyell, Alameda; A. S. Shadd, Melfort; T. A. Patrick, Yorkton.

Committee on Ethics.—G. R. Peterson, Saskatoon; A. C. McKean, Rouleau; D. R. Davis, Estevan.

The next meeting of the Association will be held at Prince Albert, as soon as possible after the close of the coming British Medical Association meeting.

RESOLUTION RE TUBERCULOSIS.

At a meeting of the Saskatchewan Medical Association, held at Saskatoon on March the 15th, 1906, it was moved by Dr. Seymour, seconded by Dr. Kemp, and carried unanimously: "That the Secretary of this Association be instructed to memorialize the Dominion Government as to the necessity of taking immediate and definite action with regard to the treatment and prevention of tuberculosis among the Indians on Reserves and in the Industrial and other schools in this Province, by the establishment of sanatoria in the vicinity of Indian Reserves. Attention is directed to the amount of tuberculosis existing among the Indian children attending schools and the necessity of removing infected children to sanatoria, where they may be treated separately, and be no longer a source of transmitting the disease to others, and also that cases of tuberculosis occurring among adults and others not in the schools may be properly isolated and treated. And be it yet further resolved that this resolution be published in leading Medical Journals and news-

papers, also that a copy be presented to the Canadian Association for the prevention of tuberculosis at the coming meeting in Ottawa, and that copies be sent to Hon. Frank Oliver, Minister of the Interior; Frank Pedley, Superintendent-General of Indian Affairs, Ottawa, and Dr. P. H. Bryce, Medical Inspector for the Indian Department, Ottawa."

G. A. CHARLTON, Secy.-Treasurer.

Physician's Library.

P. Blakiston's Son & Co. have sold of Gould's Medical Dictionaries during 1905, 17,084 copies; they have sold previously, 181,173 copies, making a total sale to date of 198,257 copies. It is their opinion that this grand total has been achieved by reason of the intrinsic merits of the books having been recognized throughout the English-speaking world.

International Clinics. Vol. IV. Fifteenth series. J. B. Lippincott Co.

The volume before us is quite up to the usual standard of excellence and presents a number of very interesting articles. In glancing over the first article, "The Treatment of Psoriasis," by Wm. S. Gottheil, M.D., we were reminded of a very excellent paper on this subject, in one of the early volumes of clinics, by Dr. George Henry Fox, and on looking it up we find it in the April Quarterly for 1891 (the first of the series, if we are not mistaken), and we were impressed with the similarity of the drugs used; but the different and, what seems, much more satisfactory methods of applying the remedies. By the way, a comparison of the Quarterlies of 1891 and those of the present, are by no means unfavorable to the former; and this is by no means meagre praise, when we consider the high state of excellence which characterize the present volumes. Among other important articles may be mentioned: "The Symptomatology and Diagnosis of Malta Fever," by Charles F. Craig, M.D.; "The Study of the Clinical Course of Joint Tuberculosis by Means of the X-rays," by Albert H. Freiberg, M.D.; and "An Experimental Study of the Effects of Rontgen Rays upon the Blood-forming Organs, with special reference to the treatment of Leukemia," by Aldred Scott Warthin, Ph.D., M.D.

The Practical Medicine Series of Year-Books, comprising ten volumes on the year's progress in medicine and surgery. Under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-graduate Medical School. Series 1905. Chicago: The Year-Book Publishers, 40 Dearborn St.

Vols. I. and VI. Treat of General Medicine. Edited by Frank Billings, M.S., M.D., and J. H. Salisbury, MD.

Vol. II. General Surgery, by John B. Murphy, M.D.

Vol. III. Embraces three departments. The eye, by Casey A. Wood, C.M., M.D., D.C.L.; the ear, Albert H. Andrews, M.D.; the nose and throat, Gustavus P. Head, M.D.

Vol. IV. Gynecology, by E. C. Dudley, A.M., M.D., and C. von Bachellé, M.S., M.D.

Vol. V. Obstetrics, by Joseph B. De Lee, M.D.

Vol. VII. Pediatrics, by Isaac A. Abt, M.D., and Orthopedic Surgery, by John Ridlow, A.M., M.D.

Vol. VIII. Materia Medica and Therapeutics, by George F. Butler, Ph. G., M.D., with the collaboration of George S. Browning, B.S., M.D. Preventive Medicine, by Henry B. Faull, A.B., M.D.; Climatology, by Norman Bridge, A.M., M.D.; Suggestive Therapeutics, by Daniel R. Brower, M.D.; Forensic Medicine, by Harold N. Moyer, M.D.

Vol. IX. Anatomy, Physiology, Pathology, Bacteriology, Dictionary, by W. A. Evans, M.S., M.D., Adolph Gehrmann, M.D., William Healy, A.B., M.D.

Vol. X. Skin and Venereal Diseases, Nervous and Mental Diseases, by W. L. Baum, M.D., Hugh T. Patrick, M.D., Charles L. Mix, A.B., M.D.

This is essentially a Chicago production. Most of the authors are well known to the medical fraternity, and are in the front rank of their profession and chosen specialists. The others are mostly connected with teaching faculties in Chicago and are winning their spurs. This promises well, then, for an annual production of merit and comprehensiveness. A volume is issued about every month. It will be seen from the foregoing introduction *re* titles that the entire range of medicine is sought to be covered, and in the 1905 series it appears to have been accomplished to purpose. Chicago medicine is to be congratulated upon the production of this handy series. Each book is neat, nicely printed, and the entire series will make a valuable edition to any library.

Christianity and Sex Problems. By HUGH NORTHCOTE, M.A. Crown Octavo, 257 pages. Bound in Extra Cloth. Price, \$2.00, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

There is a large proportion of the laity to whom the sex problem, or any literature bearing on this subject, is a source of morbid interest. Quacks know this full well, hence the fascinating advertisements purporting sure cures for lost manhood, etc. Not a few clergymen—more especially professional revivalists—like to speak or write on this subject. The above work seems to be a case where the layman has undertaken to write for the enlightenment of the medical profession, and has evolved a work which seems to be both good and new; that part which is good is not new, while that part which is new is not much good to the medical man.

Diseases of the Eye. A Handbook of Ophthalmic Practice. By G. E. DESCHWEINITZ, M.D., Professor of Ophthalmology in the University of Pennsylvania. Fifth edition, revised and enlarged. Octavo of 894 pages, 313 text-cuts and six chromo-lithographic plates. Philadelphia and London: W. B. Saunders Company. Canadian Agents, J. A. Carveth & Co., Limited, 434 Yonge St., Toronto, 1906. Cloth, \$5.00 net; Half Morocco, \$6.00 net.

Dr. deSchweinitz's work on the eye is so well known that anything but a mere mention of the new edition seems superfluous. The success it has achieved is readily accounted for if one but glance through its contents. In this edition, enlarged by the addition of new matter to the extent of some one hundred pages, there have been added, amongst other subjects, chapters on the following: X-ray Treatment of Epithelioma, Xeroderma Pigmentosum; Purulent Conjunctivitis of Young Girls; Jequiritol and Jequiritol Serum; X-ray Treatment of Trachoma; Infected Marginal Ulcer; Keratitis Punctata Syphilitica; Uveitis and Its Varieties; Eye-ground Lesions of Hereditary Syphilis; Macular Atrophy of the Retina; Worth's Amblyoscope; Stovain, Alynin; Motais' Operation for Ptosis; Kuhnt-Muller's Operation for Exotropion; Haab's Method for Foreign Bodies; and Sweet's X-ray method of Localizing Foreign Bodies. Other chapters have been rewritten. The excellence of the illustrative feature has been maintained, and thirty-three additional text-cuts have been added. Dr. deSchweinitz's work was long ago recognized as an authority, and this new edition goes a long way in strengthening its reputation, if any strengthening be needed.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

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The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVI.

TORONTO, APRIL, 1906.

No. 4.

COMMENT FROM MONTH TO MONTH.

An evening paper in Toronto published a short time ago the salaries of those practitioners employed in the Provincial hospital service of Ontario. Neither the amounts paid to the superintendents nor to their assistants are excessively large, although in many instances the present Government has seen fit to add to the former salaries. The question is: What inducement is there to a young man in medicine in this Province to enter the service of the Provincial hospitals for those of unsound mind, when the emolument to an assistant never, perhaps, goes beyond \$1,500 per annum; when there is practically nothing to spur him to qualify for an expert alienist; when he is constantly and regularly passed by when promotion is in sight for a politician, fresh from the stump or party caucus? Once a professor in one of our medical colleges (he was not a physiologist) said it requires a good deal of nerve for a man to accept a position as examiner for physiology, who had not read any physiology for twenty years. It surely requires more for a politician to accept a position over men who have given fifteen or twenty years in con-

stant practice upon those in these self-same public institutions. These politicians must be exceedingly great in the "uptake," when they consider themselves qualified for such positions.

The efficacy of vaccination has been so long established and its worth so satisfactorily proven to the regular medical profession, that it seems now a little out of place to say even a word in its behalf in the way of upholding it, in any medical journal. But the late action of the Toronto Board of Education in abolishing the compulsory vaccination of school children, has brought the question to the fore again for the time being. It is only to refer to one of the claims of the anti-vaccinationists that we now take any notice of the subject. This claim is put forward with a great deal of gusto, and is apparently believed by the author of the claim that to it there attaches a great deal of weight. Of this, however, let his mind be disabused. It is alleged that one of the members of the Ontario Board of Health, at a recent meeting of the Association of the Executive Health Officers of Ontario, asked his auditors: "Can you guarantee to the parents of your patients in vaccination that tetanus will not follow as a result of this operation?" Of course no doctor can guarantee that, for tetanus has been known in some few isolated and very regrettable cases, to have followed vaccination. Nor can any doctor guarantee that no blood poisoning will follow, nor gangrene, nor syphilis, nor any other malady that can enter one's system through an abraded skin. Neither can any doctor guarantee absolutely, that he himself will return unscathed from any operation, for physicians and surgeons have fallen victims themselves to and have lost their lives to the slightest of operations upon their patient. Neither can he guarantee that his patient will survive the anesthetic, be the anesthesia induced by an anesthetist never so competent and never so careful. Yet deaths do occur now and again under or from the effects of anesthesia. By analogous reasoning the anti-vaccinationists should call for the suppression of chloroform, ether and all other anesthetics.

During the past year or two extensive research has been carried on with the object of determining the exact causative agent in syphilis; and it would seem that the problem has, in the main, been solved. About two years ago Metchinkoff commenced a series of experiments at the Pasteur Institute, with anthropoid apes, whereby he proved absolutely that syphilis could be transmitted from man to the higher order of the ape. That the disease could be transmitted from one ape to another was also readily demonstrated, the infected animals showing both primary lesion, and, later, typical secondary lesions. The same experiment applied to monkeys, produced a primary sore, but no secondaries. As a result of these experiments, various investigators applied themselves with renewed interest to the discovery of the specific micro-organism. In January, 1905, Siegel, in Berlin, announced the discovery of a micro-organism characteristic of syphilis and belonging to the protozoa. Schaudinn, the eminent biologist, was interested with the verification of this discovery, and he succeeded in finding an organism (which had previously been described by Bordet and Geugon—two Belgian observers) in the form of a spirochæta. Schaudinn, working with Hoffman, the eminent syphilographer, investigated twenty-six cases of primary sores and papular syphilides, and in all the cases they found the spirochæta in varying numbers. The exceedingly delicate structure of the organism, and also the fact that it stained very faintly, suggested the name of *spirochæta pallida*. Dr. L. B. Goldhorn, of New York, has suggested a stain which makes the demonstration of the *S. pallida* much more distinct. The organism varies in length, usually about the same as the diameter of a red corpuscle. Its curves are sharp and regular (unlike those of the spirochæta, found in the smegma or simple stomatitis), and the organism is actively motile, its movements resembling those of a snake. It seems to move forward or backward with equal facility. It is rarely found in the blood and probably infects the system through the lymphatics. It has never been demonstrated in tertiary syphilis.

Science Notes.

AN electric heater as a substitute for a hot water bottle has been devised by a resident of Ohio. There is an incandescent lamp which is closed in by a perforated metal case. It can readily be attached to any electric lamp socket. Then when the current is turned on the lamp will heat the casing. To avoid direct contact of the metal with the body a bag of some soft material is placed over the metal casing. It is concave on one side longitudinally to conform to the body and has the advantage of sending out heat continually and at a constant temperature.

A RESIDENT of Birmingham, Ala., has invented an eye-massage machine. By it mechanical vibrations can be imparted to the eye through an electrically operated vibrator. It is so constructed as to permit of either primary or Faradic currents to the eye. It is used for catarrhal troubles of the eye and eyelid, as well as for muscular nerve weakness.

A RESIDENT of New Rochelle, N.Y., has invented a packing of paper, one side of which is a mass of absorbent material. Both the packing of paper and the absorbent are medicated. When dampened and applied the medicines exert a curative effect and at the same time cleanse the parts. It appears to be for piles and fissures.

A NEW hypodermic syringe, designed to secure a tight fit of the piston in the barrel, has been invented by one Mr. J. W. Horner, of Columbus, Ind. It is said to be a very compact instrument.

A NEW surgical instrument, hailing from Leiden, in the Netherlands, is designed for removing a rib. The rib to be cut through is laid bare and here the pleura is removed and pushed away from the rib. The instrument is then held in such a way that its hook is turned towards the pleura. The operator pushes the hook on the piece of rib laid bare, along the rib, by little jerks and so loosens the pleura more and more from the rib, by little jerks at the place where separation is to take place. The two shanks of the instrument are then pressed together, when a knife passes over the same and cuts through the rib.

DENATURIZED is a new word not yet in the dictionaries which is applied to certain alcohol. It is common alcohol to which, if some substance such as wood alcohol be added, renders it unsafe for any purpose other than mechanical. There are other substances that can be added to alcohol with like effect.

IN a paper presented to the Académie des Sciences, Messrs. Guntz and Roederer mention their researches upon the preparation and properties of the metal strontium. The properties of this metal are but little known up to the present, and seem to differ according to the authors who treat the question. Therefore, it seemed of interest to take up the study of this body. The authors prepare it by the method which they already used in preparing barium. At first the hydride of strontium is formed, which is free from mercury by the continued action of hydrogen upon a strontium amalgam. When placed in a vacuum produced by the mercury pump and heated to 1,000 deg. C. this body is decomposed and we are able to condense the vapor of strontium on a cooled steel tube without any difficulty. The authors mention some of the properties of the metal which they have observed. Their product contained 99.43 per cent. of the pure metal. It is of a silver white color and is crystalline in form, but it tarnishes almost instantly when in contact with the air. It melts at about 800 deg. C. and volatilizes at a higher temperature. Dry carbonic acid gas has no action upon it in the cold. At a red heat this gas is absorbed with formation of a carbide and also of strontia. Ether and benzine have no effect on the metal, but absolute alcohol dissolves it easily and hydrogen is given off. Water is also decomposed by the metal, forming strontia, which is dissolved. In the test which they made to find the heat caused by the oxidation of the metal, they find that this lies between the figures for calcium and barium, as the chemical analogies lead us to suppose,—*Sc. Am.*

CONSUL PIKE, of Zittau, reports that an interesting discovery is being discussed by the German press, which refers to the result of a recent investigation by Prof. Emil Fischer, of Berlin. He writes:

"It is contended that the principle nourishment required by the human body for its maintenance is albumen, according to the renowned professor of physiology, Pfeiffer, the source of all muscular strength. For this reason it has at all times been the endeavor of our learned men to obtain more knowledge of this

important ingredient of our daily food. Up till now all such efforts have been in vain, but it was recognized that were it possible to make artificial albumen, a complete change in the present system of nourishing the human body would be brought about and would render the now so necessary meat foods to a great extent dispensable.

"Prof. Emil Fischer, director of the leading chemical institution, the Berlin University, has gained the credit of having accomplished the first analysis of natural albumen. He has established the composition of the various ingredients, some of which he has succeeded in producing artificially. The substance thus obtained he has called 'polypeptide,' and it is said to possess a large number of the properties characteristic of natural albumen. The vast importance of this discovery will be better comprehended when we realize that the introduction of this artificial food will reduce the disastrous effects of bad harvests, pestilence, etc., to a minimum, and cause famine to become a thing of the past."—*Sc. Am.*

A NEW compound described by Dr. T. Gigli has appeared in the European chemical trade which is designed to imitate saccharine. It is known as "banana essence." The taste of this syrup liquid is at first caustic and then bitter, but soon after very sweet. Its specific gravity is 1.188 at 20 deg. C., and it gives an acid reaction. Analysis shows it to contain 54 per cent. of saccharine in combination with a base analogous to pyridine. Heated on platinum foil it gives white fumes, then burns with a bright flame, leaving a thin layer of carbon. When the latter is burned, the ash is negligible. The syrup gives a precipitate with Nessler's liquid and most of the alkaloid reagents. Adding dilute mineral acids we can separate the saccharine as a white crystalline precipitate, and ether dissolves it again. By evaporating the ether solution we have white crystals which melt about 225 deg. C. The author tried to prepare a solution of saccharine in pyridine, but did not obtain a product identical with the above.—*Sc. Am.*

EVERYONE knows that the human body is a conductor of electricity, but that it may be employed as a radiator and antenna instead of the usual aerial in wireless telegraphy, may not be so well known. During the recent electrical show at the Madison Square Garden, a series of experiments was performed by Prof. Ovington, of Boston, Mass., with high-potential and high-fre-

quency currents. One of these consisted of substituting the body of the lecturer's assistant for the usual vertical conductor used in sending wireless messages. The connections were made by the current from the machine passing through the assistant's body, from whence the energy was radiated as wireless waves in the ether. The messages were sent from this novel radiating arrangement in the small demonstration hall at the extreme western end of the building, and were received by a De Forest receptor set up and furnished with the usual wire antenna located in about the middle of the main auditorium. The potential and frequency of the oscillations were very much in excess of those utilized in the commercial transmission of wireless telegrams and hence the waves radiated were exceedingly short. It was Prof. Tommasini, of Geneva, who first demonstrated that the human body could be successfully substituted for an aerial of the same length and capacity. The body is not, of course, as good a conductor as are the metals, but this is offset by the fact that a current of high frequency penetrates the skin only a very small fraction of a millimeter. M. Emile Guarini, of Brussels, actually sent messages through space by connecting one human body to the positive side of a spark-gap, and another similarly connected to one terminal of the coherer.—*Sc. Am.*

THE physician of the future will find his greatest service in prolonging human life. The asylum and the poorhouse are not to be regarded as shining lights of advanced political economy, but there is something in life besides mere political economy, and the prolongation of existence is regarded as one of the chief functions, both of the medical profession and of public charities. On the other hand, it must be considered that there is a distinct economical loss in cutting off from existence a man before he has run the full course of his career. To train a man for usefulness requires now fully a quarter of a century, and it seems only fair that he should have at least twice that time for the manifestation of his activities. If, therefore, he be cut off at thirty-five, forty, or forty-five, the community is robbed of service to which it is entitled.—*Sc. Am.*

THE process of pill-making in a large manufacturing pharmaceutical house is very interesting. The powdered drugs are carefully mixed, and moistened with a fluid of special composition. The mass thus formed is worked to a proper consistency upon revolving iron rollers, and afterward divided into portions of definite weight. These are fed into a machine which de-

livers the mass in long, slender cylinders or "pipes," varying in diameter according to the required size of the finished pill. The pipes are accurately divided by another automatic machine into segments which are rolled into pills, either ovoid or spherical in shape. Sugar-coating is applied in revolving copper pans, such as those used by the manufacturers of confectionery. As the pan revolves the pills roll and tumble over each other, collecting the coating material on their surfaces, and eventually become highly polished by mere friction with one another. Gelatin coating is applied by means of special machines of recent design, which are so ingeniously constructed that a perfect coating can be applied to thousands of pills with remarkable rapidity.—*Sc. Am.*

THE fly is doomed; the fiat has gone forth, and its days are numbered. Doctors have recognized the fact that the house fly is not only a nuisance, but also a real danger, because it is the bearer of microbes and nastiness of all kinds. Fired with the spirit of enterprise, and wishing to do good to humanity at large, the *Matin*, of Paris, recently offered a prize to the discoverer of the most practical and efficacious means of destroying these insect pests, and thus eliminating one great source of the spread of epidemics.

A pamphlet entitled "*Delenda Musca*" has carried off the prize.

According to the writer of this essay, very few people are aware that the domestic fly lays its eggs in cesspools, drains, liquid manure, and dung heaps of all kinds. In these delectable media the *Musca domestica* deposits oblong eggs, which are opened by the detachment of a narrow longitudinal band or strip—much in the same way as the blade of a knife is opened. The larvæ grow with surprising rapidity, attaining their full size, in summer, in eight days' time. One fly may give birth to millions of others, as it breeds continuously for several consecutive months (usually from May to October). Assuming that one specimen lays 200 eggs (containing an equal number of males and females) then, as will be seen from an easy calculation, in six months' time one hundred thousand million flies will be brought into the world to tease bald-headed men and the helpless in general. After showing that it is useless to attack the full-grown insect, the author seeks some means of destroying it while it is in the period covered by the laying of the egg to the formation of the pupa—just when the insect is most vul-

nerable, and is found collected together in more or less considerable quantities. The greatest points of attention to this end are cess-pools, muck heaps, drains, manure heaps, and the like. Arsenic and arsenical compounds should not be used for the destruction of flies' eggs and larvæ in open cesspools in country districts, where—too often, unfortunately—they are in underground or other communication with wells, watercourses, and springs, which might thus get poisoned. Recourse should be taken to some substance which not only dissolves in the liquid contained in the drain, but which will penetrate right into the heart of solid matter. This substance must be of a nature to withstand fermentations and all transformations experienced by the solids contained in the cesspool, as they are always, in such media, of ammoniacal and reductive nature. These reactions show that it is useless to employ sulphate of iron, sulphate of copper, etc., for although in the beginning these metallic salts might have some effect, they would subsequently become changed by fermentative influences and lose their efficacy. The first trials made showed that ordinary soda, mixed with ordinary chloride of zinc (in the proportion of 5 kilogrammes of each to every cubic meter of matter), was quite sufficient to kill the larvæ and prevent the hatching of further eggs laid in the same place during the season. This process could, if necessary, be used for stationary, hermetically closed cesspools, but it would not do for movable closets, sewage tanks, or open drains. Petroleum was then tried by the author of the pamphlet in question, in the proportion of one liter to every superficial meter; but in a short space of time—due, probably, to the slight rise in temperature, caused by fermentative processes—the petroleum disappeared. This was verified by putting a stick into the cesspool; if petroleum had still been present, it would have left traces thereon. Coal tar was then tried with much better results, although they were still not all that could be desired. The most satisfactory results were secured with raw petroleum or raw schist oil (residue of distillation). Two liters per superficial meter were mixed with water, the whole being well stirred up with a piece of wood. This, on being poured into a drain or closet, will form a stratum of oil which will destroy all the larvæ, while, even should flies not be prevented from entering the drain, at least all the eggs they may deposit will be prevented from hatching. This oil is sufficiently consistent and tenacious to adhere to the walls of drains, to form a coating over solids, and remain attached thereto for a long time. This protective layer

of oil also facilitates the development of anærobic bacteria which cause the rapid liquefaction of solids, thus rendering them quite unsuitable as a breeding ground for Diptera. In the case of manure heaps this oil may be mixed with earth, lime, and fossil phosphates, in which state it is sprinkled (preferably in the spring) over all sources likely to tempt young couples of the Diptera family to start housekeeping and the rearing of a family.—*Sc. Am.*

A FEW months ago attention was called in these columns to a method of producing anesthesia by means of blue light. It was not claimed for the method that it would answer for any but minor surgical operations; still it seemed sufficiently promising for the painless extraction of teeth. The patient was submerged, as it were, in a bath of blue light. The rays, it was thought, influenced the brain through the optic nerve. Perhaps there was also something of hypnosis in this supposed effect.

Dr. J. C. Watkins, a southern dentist, has conducted some experiments which have certainly added much to a true conception of the cause and effect of bluelight anesthesia. He used the blue light, not for the extraction of teeth, but for "the reduction of swelling and the alleviation of pain." The system that he advocates is simple. It consists merely in applying the blue rays directly to the part affected.

The apparatus which he employs comprises a sixteen-candle-power blue electric light globe arranged in a funnel-shaped tin shield, which at its mouth is about four inches in diameter. This is extended about four inches, and has at its end a ground blue glass and convex lens. The ground blue glass is used to disseminate the blue rays so that the patient may not know the simplicity of the apparatus; no especial virtue is to be attributed to the lens.

A clinical history of cases which he has treated and which he has enumerated and discussed in the *Dental Cosmos* more than bear out the doctor's claims for the anesthetic effect of blue rays.

Still another method of producing anesthesia is that of Prof. Leduc, whose studies with electric currents of low tension have attracted not a little attention. Dr. Louise G. Robinovitch, of New York, one of his assistants, has continued his work and has recently published the results of her investigations. Thus far chiefly animals have been used for experimentation. With 110 interruptions per second, the animal receiving about 1.3 milliamperes, at 5 1-2 volts, complete anesthesia results. The

preliminary contractions seem to be painless. General and special sensibility and consciousness are soon abolished. When fully under the influence of the current, the animal may be picked up by a fold of its skin, turned from side to side, pinched or pricked without provoking any reaction of its heart. Hearing and sight are lost. The animal remains limp and senseless so long as the current is kept up, sleep being immediately interrupted by the opening of the circuit. Once awake, the animal shows no untoward symptoms. A large number of these experiments made in Prof. Leduc's laboratory were accompanied by no objectionable manifestations. In some instances the same animal has been subjected to the experiment several times during the same day, without causing the animal any apparent discomfort or fatigue. Prof. Leduc, Prof. Rouxeau, and Dr. Robinovitch subjected one animal to electric sleep during a period of three hours and ten minutes, without having caused it any discomfort. Prof. Leduc has himself performed the experiment on dogs over one hundred times and on rabbits a good many times, obtaining good results in all the cases. He has studied the current in its various phases, and cautions against its application for the purpose in question with a lower frequency of interruptions. A higher frequency is also useless.

Prof. Leduc submitted himself to experiment, and the description he gives of his sensations during this sleep is interesting:

"Although disagreeable, one can readily stand the sensation produced by the excitation of the superficial nerves, as this sensation gradually dies away in the same manner as does the sensation produced by a continuous current; after reaching its maximum, the disagreeable sensation commences to wane, although the potential is still increasing. The face is red, and slight contractions are visible upon it, as well as on the neck and even the forearms; there are also some fibrillary twitchings, and tingling sensations extend to the hands and tips of the fingers as well as to the feet and toes. As regards cerebral inhibition, the center of speech is first to be affected, then the motor centers become completely inhibited. There is impossibility of reaction even to the most painful excitations. At this stage it becomes impossible to communicate with the experimenter. Without being in a condition of complete resolution the limbs present no rigidity. Some groans are emitted, but not on account of any pain; excitation of the laryngeal muscles seem to cause the sound. The pulse remains unaltered, but respiration is somewhat disturbed. The current was gradually increased to 35 volts, and

its intensity in the interrupted circuit was 4 milliamperes. When the maximum of the current was turned on I could still hear, as if in a dream, what was being said by those near me. I was conscious of my powerlessness to communicate with my colleagues. I still retained consciousness of contact, pinching and pricking in the forearm, but the sensations were stunted, like those in a limb that is "asleep." The most painful impression was that of following the gradual dissociation and successive disappearance of the faculties. This impression was similar to that experienced in a nightmare, in which one feels powerless to cry out for help or to run away when facing great danger."

Prof. Leduc regrets very much that his colleagues did not increase the current sufficiently for complete suppression of sensibility and inhibition of consciousness. The experiment was performed twice, lasting twenty minutes each time. In both instances awakening was spontaneous, with a feeling of well-being.

As the experiment on Prof. Leduc was not complete, it may be of interest to remark that anesthesia is absolute when a current of sufficient potential is used. Dr. Robinovitch experienced herself complete anesthesia of the forearm, hand and fingers from a local application of the forearm of this current, 25 volts being used. Anesthesia was perfect.—*Sc. Am.*

News Items.

DR. H. H. CHOWN, Winnipeg, is in New York.

DR. WALKEM, of Fernie, B.C., has removed to Vancouver.

DR. GEO. W. BADGEROW has been in Toronto, from England.

WINNIPEG, at the present time, is practically free of typhoid fever.

DR. CHARLES O'REILLY has returned to Toronto after a year abroad.

DR. A. WATSON, Aberni, B.C., died there on the 24th of March.

DR. H. E. TREMAYNE, Toronto, has removed to British Columbia.

DR. LITTLE, Cookstown, has sold his practice to Dr. Grain, of Everett.

THE typhoid fever outbreak at Fort William, Ont., is now under control.

DR. LEADER, of Everett, has sold his practice to Dr. Jackson, an old Adjala boy.

THE number of smallpox cases in Ontario in February were 55, with no deaths.

THERE were 330 patients in the Toronto General Hospital on the 29th of March.

THERE were 422 cases of typhoid fever in Ontario in February, with 45 deaths.

THERE were 2,173 deaths in Ontario in February, a death rate of 13.0 per 1,000.

MR. DAN'L. D. MANN has contributed \$10,000 to the Toronto General Hospital.

ON the 1st of March there were five cases of smallpox in the Province of Quebec.

DR. DOUGLAS, Montreal, has had charge of the typhoid outbreak at Fort William, Ont.

THE Manitoba Government proposes to erect a Provincial Sanitarium for Consumptives.

MR. W. J. ROBINSON, M.D., of Guelph, has been appointed a coroner of Wellington County.

DURING the month of February the Victorian Order of Nurses made 1,762 calls in Montreal.

THE Ontario Government promises a grant of \$4,000 for a consumption sanitarium at Hamilton.

PROF. STARKEY, of McGill University, investigated the typhoid outbreak at Fort William, Ont.

DR. CASSIDY, of Moorefield, has been appointed an Associate Coroner for the County of Wellington.

DR. F. J. SHEAHAN, M.B. University of Toronto, and Hospitals, Toronto, has opened an office in Delhi, Ont.

DR. D. J. MCCOLL, Strathroy, expects to leave for Saskatoon, Sask., where he intends making his future home.

SIX hundred in-patients were treated in the Winnipeg General Hospital in February; out-door consultations, 424.

DRS. A. S. LOCKHART, of Barrowsmith, and C. W. Thompson, Clinton, Ont., have been appointed associate coroners.

DR. CL. T. CAMPBELL, London, Ont., has been appointed post office inspector for London district, at \$2,500 per annum.

MONTREAL General Hospital for February admitted 250 patients. The out-door consultations were 3,957. The deaths were 14.

TORONTO General Hospital has now a new department for neurasthenics, with 12 beds, under the charge of Dr. D. Campbell Meyers.

DR. A. T. HOBBS, of the Homewood Sanitarium, Guelph, has been elected Supreme Medical Examiner of the Canadian Order of Home Circles.

THE first wedding in Daysland, Alta., took place on Friday, when Dr. R. W. Halliday, of the town, and Miss Edith Moysey, of Toronto, were married.

A NEW semi-public ward department has been created in the Toronto General Hospital at \$7.00 per week; semi-private pay \$10.50; public ward, \$3.50.

THE Christian Scientists of Winnipeg are asking the Manitoba Legislature for exemption of C. S. treatment from the provisions of the Medical Act.

DR. MURDOCH MCGREGOR died at his home in River Port, N.S., on March 6th. Deceased was 70 years of age. He was a surgeon in the Union army.

ACCORDING to Dr. C. J. Fagan's report for B. C. in 1905, there were 146 cases of diphtheria in British Columbia, with 9 deaths, a death rate of 6.1 per cent.

THE Royal Victoria Hospital, Montreal, admitted 250 patients in February, and discharged 245; fourteen died; 2,125 consultations in the out-door department.

THE total number of patients treated in the Winnipeg General Hospital during the week ending March 24th was 351: 197 men, 95 women, 59 children, and 116 out-patients.

DR. GEO. DEVEBER, Lethbridge, Dr. Philip Roy, Edmonton, and Dr. Douglas, member of the Federal Parliament for eight years, for East Assiniboia, have been appointed Senators.

THE undergraduates of the Faculty of Medicine in the University of Toronto honored Prof. A. B. Macallum on the 9th of March by presenting him with an illuminated address.

DR. E. A. HAIST, Credition, has sold out his practice to Dr. P. J. McCue, of Shelbourne, who takes possession the latter part of this month. Dr. Haist intends moving to Hamilton.

DR. OLIVER, of Stayner, formerly of Meaford, who left the former place a couple of years ago, to take a Government position at Cardston, Alta., has been transferred to Nelson, B.C.

PROF. ALEXANDER MCPHEDRAN, Prof. Wm. Oldright, of Toronto University, and Dr. W. H. B. Aikins, Toronto, are attending the Fifteenth International Medical Congress at Lisbon.

DR. ROY NASMYTH, of Stratford, has left for Fleming, Sask., where he will take charge of a doctor's practice for a few months. Dr. Nasmyth may locate in the West, but as yet has not definitely decided.

DR. A. THOMPSON, Strathroy, Ont., died of heart failure on the first of April. He was 69 years of age, a graduate of the University of New York, and a member of the Ontario Board of Health.

DR. F. X. PERRAULT, formerly superintendent of the St. Jean de Dieu Insane Asylum, at Longue Pointe, died on the 6th of March, at the Hotel Dieu Hospital, Montreal. He was born in Montreal in 1825.

DR. PELLETIER, the Secretary of the Quebec Board of Health, states that in the town of Granby, where every one was vaccinated at a time when there was a lot of smallpox in that part of the Province, not one took the disease.

DR. W. H. GODFREY, one of the staff of the hospital, was presented at Grace Hospital with the medal of the Canadian Humane Society for conspicuous bravery in the rescue of Gladys McKibbin, in Toronto harbor, in June, 1904.

DR. W. J. DOUGLAS, Cobourg, Ont., died suddenly on the morning of the 29th of March. He was a graduate of Trinity Medical College, Trinity University's representative on the Medical Council and a member of the Ontario Board of Health.

DR. F. HALSTEAD was the first medical doctor to locate in Teeswater. Dr. Halstead left the village in 1867 or 1868, soon after Drs. Fleming and Gillies went there, and for a number of years has been in the West. A few days ago friends received word of his death, which took place on March 3rd, at Winnipeg.

DR. DUGALD STARK, M.D., C.M., of Oxford, England, whose death occurred at Torquay, Devonshire, England, on March 6th, was well known in Toronto, being a medalist of Trinity College. He was a member also of the Royal College of Surgeons, London, and a licentiate of the Royal College of Physicians, Edinburgh.

THE annual meeting of the Canadian Association for the Prevention of Tuberculosis, met in Ottawa on the 28th and 29th of March. Sir James Grant read a paper on the relation of school children to tuberculosis, and Dr. A. J. Richer, Montreal, delivered an illustrated lecture. The Hon. Senator Edwards was re-elected President.

DR. J. M. DUNSMORE, JR., of St. Joseph, Mo., son of Dr. J. M. Dunsmore, of Stratford, Ont., paid a short visit to his father recently. Dr. Dunsmore, Jr., is an old Stratford boy. He has been practising medicine in the western city the past five years, and speaks very highly of the country. He was on a visit to his friend, Dr. H. D. Livingstone, of Rockwood.

DR. MATTHEW WALLACE, Toronto, died on the 3rd of March, aged 55 years. Dr. Wallace was a graduate of Toronto University, a physician to St. Michael's Hospital, and a physician well beloved and esteemed by his confreres. He was an assiduous devotee to the cause of medical charity, and rain or shine always saw him unostentatious, jovial and friendly.

DR. CHAS. E. DOHERTY, Medical Superintendent at the British Columbia Provincial Hospital, at New Westminster, reports 123 admissions during 1905; of these ninety were males and thirty-three were females. During the year seventy-six patients were discharged, forty-three of whom had recovered. There were 402 patients, 304 males and 98 females, in the institution on the 1st of January, 1906.

A HANDSOME life-size portrait of the late Dr. T. G. Johnston, former M.P. for West Lambton, in Knights Templar uniform, has been hung in the Masonic Hall, Sarnia, by St. Simon of Cyrene Preceptory, of which Dr. Johnston was the first Presiding Preceptor. The portrait is done in India ink, is handsomely framed, and is a striking likeness of deceased. The picture was made by Charles McArthur.

THE Protestant Hospital for the Insane at Verdun, Que., after 16 years of usefulness, is making an appeal for a larger endowment. The cost per patient per day in 1905 was 55 1-2 cents; at the Royal Victoria Hospital, Montreal, \$1.74; Montreal General, \$1.35; Notre Dame, \$1.12. The Quebec Government grant for all these institutions is 34 cents per day for each patient. Verdun Hospital has a deficit of \$20,000.

THE medical men in Regina (Sask.) have as a body declared against in future entering into any contracts with friendly and benefit societies and lodges by which the members of such lodges shall receive medical attendance in return for a per capita fee paid by the society to the doctor under contract. The decision has caused some consternation among the organizations affected, involving, as it necessarily does, a substantial increase in the sick benefits paid, in lieu of the free medical attendance which has hitherto in most cases been provided.

At the last regular meeting of the Winnipeg Medical Association, the following resolution was unanimously adopted: "Whereas we have watched with interest the efforts of the Board of Health in the education of the public on the question of tuberculosis, and whereas we are of the opinion that the same form of sanatorium treatment should be established in the Province; that therefore be it resolved that we, the members of the Winnipeg Medical Association, of the City of Winnipeg, hereby endorse the action of the Provincial Board of Health in this matter and give our approval of the plans they have already formed in accordance with the Act of the Provincial Legislature, passed in February, 1904, an Act respecting a sanatorium for the consumptives."

Correspondence.

VANCOUVER, B.C., March 17th, 1906.

To the Editor of DOMINION MEDICAL MONTHLY :

Sir,—The Vancouver Medical Association, at its regular meeting of March 12th, 1905, resumed the discussion of Patent Medicines. There was unanimity in the conviction that laws should be enacted to eradicate the existing evils. It was pointed out that in their promiscuous sale there exists a real danger to the public and that gross frauds are being perpetrated and that in their advertisements morally dangerous literature is being circulated.

As is well known, the drugs that are commonly used in patent medicines are opium or its derivatives, as found in consumption or colic cures and soothing syrups; cocaine in catarrh mixtures, acetanilid in headache powders, chloral hydrate in drink cures; belladonna, ergot and cotton root in preparations recommended as abortifacients; and alcohol which is used in medicines represented to cure all diseases. Most of these are poisonous and so immediately dangerous to life; opium in any form is so particularly dangerous to children. On the other hand, all are even more objectionable if taken for any length of time. At first they relieve symptoms or supposed symptoms or create pleasant feelings. This impels the user, who is unconscious of what he is taking, to continue their use until a habit is acquired, which eventually leads to the ruin of his mental, moral and physical nature. Yet these are the drugs which are sold in a secret way and without license.

The majority of these preparations, as well as being dangerous, are fraudulent, because the vendors of them, in their advertisements, claim to cure many diseases which scientists know are incurable. But there is another class of preparation which is absolutely fraudulent. They contain no drug of any medicinal value, but depend for their sale entirely upon the extravagant and false claims of the manufacturer. Thus the despairing chronic of the imaginative neurotic is preyed upon.

Then again in the advertisements which appear in our periodicals, both religious and secular, very corrupting literature

is constantly being circulated. This cannot but have a debasing effect upon some and is disgusting to all others.

The secrecy which the existing laws allow in connection with the so-called patent medicines, is mainly responsible for all these evils. If persons knew, as they should know, what is offered them, they would be able to discriminate between the beneficial and harmful and between the honest and dishonest.

Many of the worst of the Patent Medicines are distributed through His Majesty's mails, which, it seems, should not be allowed.

At the close of the discussion, the following resolution was unanimously adopted:

"Whereas, in the opinion of the Vancouver Medical Association, there exists a real menace to the community in connection with the sales of Patent Medicines. And

"Whereas the evils are so complex that a proper solution can be arrived at only by competent disinterested persons.

"Be it resolved that the Dominion House of Commons, now in Session, be petitioned to appoint a commission to investigate this whole matter with a view to enacting laws which will eradicate these evils."

Respectfully submitted and signed on behalf of the Vancouver Medical Association.

H. McTAVISH, M.B., M.R.C.S.

WILLIAM STEPHEN, B.A., M.D.

WILLIAM D. KEITH, M.B., M.R.C.S.

Publishers' Department

ACUTE GASTRIC CATARRH.—This is a common disease, and is caused usually by the action of improper and irritating food on the gastric mucous membrane. Any local irritant may, of course, excite inflammation of this membrane if brought in contact with it, and acute gastric catarrh is an almost invariable result of the action of an irritating poison; but the common and familiar forms of this disease are most frequently the result of improper feeding. Some poisons are, however, much more predisposed to suffer from this disease, from comparatively slight causes, than others. It is a fact that too scanty a secretion of gastric juice, by retarding digestion and favoring abnormal decomposition of food within the stomach, predisposes to this calamity, and hence it is necessary in febrile states, when, owing to the high temperature, there is much loss of food from the skin and lungs and therefore diminished secretion of gastric juice, to diminish the quantity of food accordingly. The common custom of urging such patients to take more nourishment than they wish is often injurious, unwise, and unphilosophical. Generally, anemic and feeble persons, convalescent from acute diseases, are also liable to attacks of acute gastric catarrh from taking more food than their gastric juice is capable of dealing with, so that some of the undissolved ingesta decompose and set up irritation of the gastric mucous membrane. Overloading the stomach with food, even in healthy persons, is a common cause of acute gastric catarrh, owing to the abnormal decomposition which the excess in ingesta undergoes. This is a frequent cause of gastric catarrh in young children, and especially in children at the breast, who are allowed, for the sake of quiet, to nurse until they overload their stomachs. Imperfect mastication also may give rise to gastric catarrh, as the food then reaches the stomach in a comparatively undivided state, so that the gastric juice comes in very imperfect contact with it, and hence portions remain undissolved and undergo decomposition. Rich and fat sauces and too much meat eaten may lead to the same results. Food eaten when it is already in a state of decomposition may similarly give rise to gastric catarrh, and this is especially noticeable in delicate and sensitive persons. Game and fish kept too long, entrees made of meats that are not perfectly

fresh, new beer and sour wine, and, in young children, milk that is not quite fresh, are favorable sources of gastric catarrh. Too free use of spices, stimulants and condiments, and especially the habit of taking alcohol in a concentrated form, lead to the same result. In severe cases of acute gastric catarrh the indication with respect to food is to so limit it as to quantity and quality that the acutely inflamed mucous membrane shall be spared all irritation or excitement from ingesta, and the whole organ be, so far as possible, put in a condition of physiological rest. Entire abstinence from food, at least from food requiring much digestion and lacking proper elements of nutrition, may often be enforced with the greatest advantage for a period so long as the taking of ordinary food excites nausea or vomiting or severe pain. In my experience, this abstinence is well borne only where Bovinine is used. As a fact it is so, even in cases where the strength has been exhausted by previous suffering and long inability to digest all food matter. In all such cases Bovinine may be given with the assurance that it will secure the rest needed by the hyperæmic and irritated gastric mucous membrane. During convalescence, when there is a great craving as well as a real need for proper food, Bovinine is ideal; it soothes the mucous membrane, gives gentle and proper stimulation, puts the entire digestive tract at rest, and absolutely keeps up nutrition. The following case is submitted:

Mary J. Aged 43. American. Diagnosis, acute gastritis. Patient admitted to hospital Jan. 9, 1906. The condition was at its height, her temperature being 103.50 F. She suffered greatly with nausea and vomiting and much gastric pain. She could not retain food of any kind and was very nervous and almost in a state of collapse. She was given 15 drops of Bovinine in lime water every half hour. The first six doses she vomited. The seventh dose was increased to thirty drops, and this she retained, and evinced great relief from pain. After the eighth dose she fell asleep and rested quietly for two hours, when she was awakened by the pain. The Bovinine and lime water was administered, and immediate relief from pain followed. On January 14th her temperature was almost normal. She had very little pain, and she was much less nervous and stronger. The Bovinine was now increased in quantity to a teaspoonful every hour, in peptonized milk and lime water. From this time on her case progressed without interruption, and on January 21st she was discharged cured. Two days before leaving the hospital she had been on a light general diet, which she had no trouble in digesting.

P. J. BIGGS, M.D.

THE MODERN MANAGEMENT OF MALARIAL ANEMIA.—One of the most obstinate forms of anemia with which the physician has to contend is that which succeeds malarial infection. This particular form of anemia is, unquestionably, due directly to the structural changes induced by the protozoon parasite. While a mild form of anemia is a common, if not invariable, consequence of malarial infection, there is a severe type, termed *malarial anemia*, which not infrequently occurs. This latter variety usually responds slowly to curative measures; and, since its existence renders the individual a fit subject for recurring malarial manifestations upon the slightest exposure, the importance of its cure cannot be too strongly emphasized. The doctrine of the latency of malarial poisoning in the human body is rapidly gaining in popularity. Some authorities even go so far as to claim that a person who has once been inoculated with the malarial protozoa never completely recovers. Whether this be true or not, it is certain that the protozoon parasite does exert an influence which tends, for a great length of time, to lower vitality and render feeble the powers of resistance to renewed attacks. This is especially true in the case of women, children and persons of advanced age. Recent investigators unite in ascribing the cause of *malaria anemia* to the liberation of hemoglobin from the red corpuscles in the blood vessels. The pigmentation resulting from this liberation of hemoglobin is one of the characteristic of malarial infection. And while the coloring matter may remain in the blood stream, it usually infiltrates into the cells and neighboring tissues. The deposit of pigment is especially great throughout the tissue of the liver and spleen. The thickening and softening of the mucous membrane of the stomach, which always attends malarial infection, seems likely to contribute, at least to some extent, to the development of anemia. In every instance the degree of the anemia is in direct ratio to the amount of the hemoglobin liberated from the red corpuscles. And this fact explains the philosophy of effecting repair by the administration of iron, the hemoglobin-contributor. Whether or not the protozoon parasite is ever completely eliminated from the economy remains an unanswered question. But it is now universally conceded that the protracted administration of iron does render the individual partly, if not completely, exempt from a return of malaria manifestations of an aggravated type. Far more so, in fact, than does quinine. Indeed, we have good cause to believe that iron does exert a destructive influence upon the malarial protozoa and increases the immunity of the individual. While it is the chief aim of the physician

to make up the deficiency of the hemoglobin in these subjects by the administration of iron, it is distinctly important, coincidentally, to increase the appetite and augment the capacity to appropriate the food ingested. To this end, discrimination in the selection of the form of iron to be employed is vitally essential. The acid solutions of the drug are ineligible because of the fact that they cannot be engaged for a long period without harmfully affecting the secretion of the digestive juices and adding to the morbid state of the mucous surfaces of the alimentary tract. Furthermore, the continued use of acid products of any sort are certain to diminish the alkalinity of the blood, thus depressing, to a very considerable extent, the nutritive processes. Then, too, headache, which is an ever-disturbing factor in these cases, is intensified by all substances of an acid reaction. The strongly alkaline preparations of iron, while less objectionable than the acid ones, are open to fault for the reason that they induce constipation, and in this manner favor auto-intoxication. By far the most effectual form of iron in the treatment of *malarial anemia* is that which is neutral in reaction and available for immediate absorption. The organo-plastic form of iron, as found in Pepto-Magnan (Gude), certainly fulfills the requirements of the physician with greater promptness and uniformity than any other product thus far evolved. This preparation—Pepto-Magnan (Gude)—is by all means the most potent hemoglobin-producing form of iron, and it undoubtedly surpasses other ferruginous products as an invigorator of the digestive and nutritive functions. These assertions are easily confirmed by the microscope. It is also an accepted fact that Pepto-Magnan (Gude) does not induce constipation, and it seems to materially hasten repair of the mucous surfaces of the alimentary tract resulting from the structural changes incident to the malarial infection. In short, Pepto-Magnan (Gude) is of inestimable value in the treatment of *malarial anemia* by virtue of its manifold advantages over other preparations of iron. If this preparation is administered for the proper length of time, the individual gains substantially in strength, flesh, physical and mental energy.

My oldest son was troubled with a skin eruption on his chin and forehead (between the eyes), which he seemed to have caught at school; it resembled a ring-worm in some particulars, but was very stubborn and hard to cure; so I sent to you for samples, believing, through past experience with Resinol, that it would do the work. After the first application I could see the

improvement, and inside of a week his face was clear again. It is one of the greatest remedies I know of for those nasty, inflamed, raw looking and rapidly growing sores so often seen on school children's faces, and will cure them every time. I have prescribed it extensively in my practice for some years past, and always with success.—John Husson, M.D., 418 W. 124th Street, New York City.

THERE is no more important department of medical affairs than that of medical transfer. When a physician desires to sell his property and practice, it is of the utmost importance that it should be done with a minimum of publicity and a maximum of speed. The system adopted by Dr. Hamill, who conducts the Canadian Medical Exchange, is at once efficient and prompt, and offers every possible security to vendors, and we advise our readers to take advantage of his many years' experience when they are thinking of selling their practices. A partial list of the practices he has for sale will be found among our advertising columns every month, the complexion of which, of course, changes from time to time.

BATTLE & Co. have just issued the ninth of the series of twelve illustrations, of the Intestinal Parasites, and will send them free to physicians on application.

PROPER MEDICATION AND CHEERFUL COMPANY.—During the past two months, we have met with more la grippe than anything else, and the number of cases in which the pulmonary and bronchial organs have been very slightly or not at all involved, has been greater than we have noted in former invasions. On the contrary, grippal neuralgia, rheumatism and hepatitis have been of far greater frequency, while the nervous system has also been most seriously depressed. With each succeeding visitation of this trouble we have found it more and more necessary to watch out for the disease in disguise, and to treat these abnormal manifestations; consequently we have relied upon mild nerve sedatives, anodynes and tonics, rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encouraging skin and kidney action, with possibly minute doses of blue pill or calomel. We have found much benefit from the use of antikamnia and salol tablets, two every three hours in the stage of pyrexia and muscular painfulness, and later on, when there was fever and bronchial cough and expectoration, from an antikamnia and codeine tablet every three

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVI.

TORONTO, MAY, 1906.

No. 5.

Original Articles.

CRIMINAL ANTHROPOLOGY—A REVIEW.

BY W. P. ARCHIBALD, ESQ., OTTAWA, ONT.

The treatment of criminals has perplexed the statesmen of all ages, and in their efforts to protect society against the criminal, all kinds of methods have been tried. For centuries the underlying principle of penal law was that on vengeance and repression. The state tried in vain to suppress crime by the terror of tortures and intimidation. "All hope abandon ye who enter here," might properly have been inscribed over the portals of every penal institution a century ago, for the whole life of the prisoner was ingeniously contrived for producing misery and despair, so that his mind might be filled with the hideous terror of it, in the belief that upon his release fear would act as a deterrent to crime. Even on his release the pitiless vengeance of society followed him up, for the criminal at that period was marked and branded for life, that he might serve as a living warning to others if he tried to fall into step with the world again.

Did it work as anticipated? Of course not. In fact crimes of property became even more daring, until experience was crystallized into the axiom that "crime thrives upon very severe penalties." In the older countries the prisons and jails

became so choked that the government had to resort to transportation and penal colonies for the disposal of their human rubbish.

After eighty years of futile experiment of this kind, the failure of the transportation plan was admitted, and practically abandoned. But this was not without its value, for, at least, it gave the world the lesson that in many cases a desperate criminal could turn over a new leaf in the new environment, and become a useful member of society. The advent of hope in our British penal institutions brought with it the dawn of a new life for the criminal classes, and opportunity succeeded where mere cruelty had failed.

In the Victorian era the penologists, profiting by the failures of the past, evolved the humanitarian plan of reformation and rehabilitation. They began to work with the criminal as well as for him. The beginning of the twentieth century has witnessed the advent of preventative methods as well as the adoption of many curative agencies now in operation in our penal institutions.

The causes of social disorders, the relationship between pauperism and crime, the better housing of the poor, the child placing from the crowded and congested slums of our larger cities, are all vital questions in the new criminology of the Dominion, and they are having the thoughtful and serious consideration of the best thinking people from the Atlantic to the Pacific coast.

The curative agencies of the Dominion penitentiaries, working through the channels of authority and discipline, accompanied by the industrial and the educational methods, with the helpful auxiliary of the parole system embracing the kindly oversight of the discharged prisoner in providing friends and employment on the day of his discharge, are producing magnificent results in the transformation of the criminal strata to the social strata of usefulness and good citizenship.

One of the great advantages England has in her penal system, is embodied in the fact that all her jails and prisons come under one authority. In Canada only the penitentiaries come under Federal authority, the province holding jurisdiction over provincial prisons and jails.

The wisdom of the parole system, and the discretion exercised in its administration can be judged by results. From the adoption of the system in 1899 until the close of the last fiscal year there were 1082 paroles granted. Of this number of prisoners paroled, 657, or about sixty-one per cent. have:

completed their sentences, under license, without violation of the conditions imposed; while 325, or thirty per cent. additional have thus far respected the conditions of their licenses which are still operative. Those who have forfeited their licenses by subsequent conviction, and who may be thought to represent the criminal element of those under license, number 24, or but little over 2 per cent. The remaining 7 per cent. have been recommitted for non-compliance with the conditions of the license but without charge of criminality against them during the period they were at large.

It cost the state \$254 per capita for the maintenance of convicts of our penitentiaries during the past year. The 222 men released on parole this past year who have proved themselves satisfactory cases have turned producers. The state has not only been relieved of the cost of their keeping in penitentiary, but these men working outside at laborers' wages (\$1.50 per day) produce in the year over one hundred thousand dollars to the support of their families and themselves. I know many of these men who are earning three or four dollars per day, having good positions as capable mechanics, etc., in various cities of the Dominion.

During the year I have twice visited the penitentiaries and jails in the west, interviewing the major portion of the men and seeking employment for the paroled and discharged prisoners.

Dorchester, N.B., and St. Vincent de Paul have had four visits during the year. In Kingston seven visits have been made in the interests of the men and working out the parole system.

A number of patrons have been secured in the cities and towns of the Dominion, who are, on my recommendation, prepared to give employment to the paroled or discharged convicts. We have provided a number with transportation, when such assistance has been deemed advantageous, and have otherwise assisted specially deserving or needy cases. At the request of their parents, five wayward boys were located in the penitentiaries, in which they had been incarcerated unknown to their parents, and returned to them on their discharge from the penitentiaries. Several cases of reconciliation and rehabilitation between husbands and their wives and families have also been made, and, where homes have been broken up through the criminality of the parents, these homes have been restored and their children when in the custody of charitable societies or friends, have been returned to their parents.

I have been able to find employment for 286 men on their

discharge from the federal institutions during the past year, apart from the paroled convicts.

REVIEW OF TABULATED PAROLE STATEMENT.

For Year Ending June 30, 1905.

The following statement of results has been compiled from figures obtained from the Commissioner of Dominion Police, and I submit them for consideration:

Convicts Paroled.	1899 1900	1900 1901	1901 1902	1902 1903	1903 1904	1904 1905	Total.
From penitentiaries.....	71	122	157	113	122	127	712
From prisons, jails and reformatories.....	1	53	89	65	67	95	370
Total.....	72	175	246	178	189	222	1082
Licenses cancelled for noncompliance with conditions...	5	99	19	11	16	16	76
Licenses forfeited by subsequent convictions.....	7	8	6	2	..	1	24
Sentences completed on parole	59	141	189	124	96	48	657
Sentences not yet terminated..	1	17	32	41	77	157	325
Total.....	72	175	246	178	189	222	1082

INCREASED JUVENILE CRIMINALITY.

Increase in juvenile criminality from 1901 to 1904:

	1901	1904
Number of Juvenile Criminals (under 20 years of age) ..	134	161

Those under 20 years of age constitute 12 per cent. of the entire number of criminals. This fact brings the origin of crime close to the homes of the country.

COMPARATIVE STATEMENT.

The man who commits murder in New York city is in hardly more danger of going to the death chair than he is of being struck by the trolley car. The facts are proven by records.

Homicides in New York City:

Year.	Number.
1866	8
1872	5
1885	84
1896	91
1904	147

In 1866 there were 4 convictions for the 8 murders committed. In 1904 there were 27 convictions for the 147 murders and two executions for the year. Seven life sentences.

	Year.	Homicides.	Convictions.
Greater London (population 6,500,000) ..	1904	24	20
Greater New York city (pop. 4,544,354) ..	1904	147	27

The aggregate homicides in one year of London, Paris and Berlin do not equal the awful murder record of New York City.

COMPARATIVE STATEMENT.

Some little comment has been made in connection with the administrative operation of the Canadian parole system, in comparison with the operation of the parole laws of the United States and elsewhere. They emanate from a source not in touch with the results or the figures given from the states and countries where the parole system is in vogue. I have gone carefully over the tabulated statements of two of the leading United States penal institutions, showing from their figures the best percentage of work accomplished under the system of a "Board of Control," or the "Board of Pardons." I think after a study or analysis of both systems you will agree that the Canadian system is second to none, not only in results accomplished, but in the principle of administration. The careful investigation sought in each case, and the thoughtful consideration given by the Department of Justice before the Crown will grant a parole to any prisoner in our penal institutions in Canada, is strongly in evidence from the results shown by the Canadian system.

The record of the State prison at Michigan City from April 1st, 1897, to April 1st, 1904, shows 909 men released on parole. 184, or twenty per cent., proved delinquent. Of this number 99 were returned to prison for crimes committed while on parole. Of 69 cases the maximum of the term for which they were sentenced expired while they were on parole, and they received their discharge. 491 earned their discharge by good conduct while on parole, 17 died, and 148 continue to make their reports required by the authorities.

From the Indiana Reformatory, of the same dates, 1611 men were released on parole, and of these 847 have been discharged after having made satisfactory reports for such time as was required by the parole Board of Control. Of the whole number paroled, 348, or 23.8 per cent., failed to comply with their conditions of parole. The majority of these men, having committed offences, were returned to the institution. Of 144 cases the maximum sentence expired and they received their discharge. One was pardoned by the governor, 36 died, and 172 continue to make their reports.

The amount of wages earned by the paroled men of both institutions netted \$587,711.26.

All our prison knowledge comes from accumulative experiences of past ages. All progress has its root in the sense of failure to realize ideals marking each epoch in the world's history from the days primeval. There are as many distinct ideals as there are groups of men. The economic ideal of a prison is that it shall be self-supporting; the administrative ideal is that it shall be secure and orderly; the punitive ideal that it shall crush its helpless inmates and strike terror into the hearts of men tempted to enter upon a criminal career; the sentimental ideal, that it shall be the abode of comfort, hallelujahs and content; the philosophic ideal, that it shall be so conducted as to reform as many of those committed to it as are susceptible of reformation and rehabilitation. These ideals spring up partly from within and partly from without. Prison officials have the opportunity to study the criminal at first hand. By their close and continued contact with him they become familiar with his peculiarities, his tastes, his notions, his sentiments, and his habits. They note the effect upon him of every detail of the discipline to which he is subjected, and the changes in their attitude to him correspond to the keener insight and more accurate judgments gained by a large and long experience in prison administration.

The outside world has a different standard of comparison. It judges by results as shown on the ledgers of the State, the docket in the criminal courts, police courts and elsewhere. From these sources we hear often the questions: Does punishment really punish? Does intimidation really intimidate? Do reformations really reform? Is there any appreciable diminution in the volume of crime in the Dominion of Canada?

Crime is old, old as the human history. The causes of crime are deep, ancient and persistent. Some day these causes may be removed. Let us live in hope, but now, it is folly to speculate

in optimistic dreams not having their foundation on sound logic or fact. The bald facts are—we must help where we can, or some will perish who might be rescued. There is no doubt the world in each cycle must grow better. What we do in our generation should be done on sound foundation and in a practical way to recommend it to those who follow and carry on the work of prison and social reform.

THE RELAPSED CRIMINAL.

RECIDIVISM.

The great plague of society is the recidivist. He is the man or woman who has gone to prison half-a-dozen times, or it may be fifty or a hundred. In some countries a criminal who has been in prison two or three times is regarded as a recidivist without reference to the nature of his offence. Under the German system he is regarded as a recidivist only when he repeats his offence.

There are recidivists who are professional and anti-social. It is the latter, whether he be a general recidivist, committing a variety of crimes, or a special recidivist, confining his infractions to a single line, who is most dangerous. The real problem in dealing with this matter is to distinguish between the accidental or occasional, and the habitual criminal.

DISCHARGED PRISONERS AND RECIDIVISTS.

We cannot separate the proper treatment of paroled prisoners from the large and important question of prison administration. When a man returns to prison a second or third time it may be because when he went out of prison he was not properly educated to go back into society, or it may be because society was not properly educated or prepared to receive him. If the convict has learned a trade through the industrial agencies of the prison which lie at the basis of all improvement, it is not so difficult to place him. But, if a man comes out of prison without industrial fundamentals inculcated into his habits, it is hard to tell which is the more helpless, the prisoner who asks for work or the man who would like to befriend him by giving him employment. I have come to the conclusion that efforts of this character, to be effective and lasting, must be carried on as a supplementary agency when he leaves the prison, followed up outside by all the better influences for his rehabilitation. As a rule the paroled prisoner meets an apathetic and sometimes hostile feeling in society when he begins to breathe the atmosphere of freedom.

This is where the services of the parole system are active and potent. We stand by the man before and after he is placed in a situation. Should he hold fast his determination to reform, we encourage him in this intention, till a man once weak and almost helpless begins to feel his footing, and in the course of time he becomes a social unit. Thus he is saved to citizenship and the state.

The indefinite sentence system, as proposed by the Inspectors of Penitentiaries in Annual Report for 1904, sessional paper No. 34, would greatly strengthen our hands in working out the problem in connection with the relapsed criminal in Canada. I would apply this system to every man going to jail or prison on the third commitment, sometimes on the second, never on the first. If a man has made up his mind to follow a criminal life, he is better off in prison than at liberty. Society also will benefit by this protection. Has society not the right to demand this protection? When conditionally released the recidivist will have an opportunity of proving himself. Should he lapse into his former life, he will immediately forfeit his parole and be returned to prison.

Let me cite the Swiss system in dealing with and reducing the recidivist prisoners in the Canton of Neuchatel. The recidivists numbered in their prisons in the year 1870, 75 per cent. of the total population. They adopted the indeterminate sentence system, and from 1870 to 1892, the result demonstrated that recidivism decreased to 4 per cent. Now the recidivist is seldom found in their prisons. Our present system in Canada has but little effect on the habitual recidivists. Very few relapsed criminals desire to reform or change their way of living. Hence on their discharge they refuse any work offered or provided to assist them. Many have said openly to me, "I prefer to follow the graft." Something should be done to lessen this great evil. Give the indefinite sentence system a trial and the axe will be laid at the root of this dangerous and pestiferous organism. With the indefinite sentence treatment, the recidivist will begin to diminish and disappear under the strong and helpful administration of our Canadian prisons.

The vagrant question is also vital. The tramp element still prospers. The man who will not work is exceedingly dangerous. Many of the serious crimes committed during the past five years can be traced to the tramp element; many of them are professional in their avocation.

A successful beggar is apt to be haughty, arrogant, dictatorial. On the whole the spirit of begging is the spirit of high-

way robbery. From an humble request for alms to a demand for your purse is but a step in begging evolution. In both cases the man wants something that is not his. There are three ways open to the human reason to gain it: earn it, beg it, seize it. The first method to a lazy man is absurd; to dig, many are ashamed. And the second, to beg, many regard it as too easy. And the last, to seize, many think to be the best of all—provided objections are not too strenuous. Therefore the highway-man is simply an advanced type of beggar! Nothing but an effective and drastic treatment will reduce the tramp nuisance to a minimum in our criminal population.

CANADIAN CRIMINOLOGY.

It is strange that the disbelief in the possibility of amendment on the part of the criminal should be so deep-seated and universal. Men and women, equally guilty before law, human and divine, but who have not been exposed to the contamination and shame of prison life, have abandoned their evil courses in response to influences exerted upon them in free life. There have been many signal instances of transformation of character and conduct occurring in prison. It would be foolish to estimate the exact percentage of corrigible and incorrigible convicts or to shut our eyes to the persistence of the criminal type of character, or to expect from the average prisoner anything more than he shall cease to be a law-breaker and become a law-abiding citizen. Religion encourages this hope, so does science, as I shall now proceed to show:

The methods and achievements of science have profoundly modified metaphysical thought, so that a new word, psychophysics, has been admitted to the dictionaries. In the psychophysical study of human nature there is a constant recognition of the vital relation between mental experiences in the operations of the brain and of the nervous system in man, of their interdependence and reciprocal relations and influence. The researches of physiologists have shed light on much that was formerly obscure in the anatomical structure and functions of the body. We have learned that every mental impression and perception, every act of memory, of the imagination, of the judgment, of the will, every passing thought or emotion, is accompanied in this life, the only life of which we have experimental knowledge, by molecular changes in nerve tissue, by nervous activity and emotion. The paths followed in the accumulation and discharge of nerve force have been partially

traced. By the aid of vivisection, scientific proof of their existence has been secured, and the functional utility of certain tracts of the brain has been demonstrated, enabling us to localize, to a limited extent, cerebral action, and to inspire the hope that the further prosecution of the investigations now in progress may dispel some portion, at least, of the mystery which enshrouds our present dual existence. The correspondence between the order of succession of nervous phenomena and the phenomena of thought, feeling and volition, and the fact that certain of them are demonstrated simultaneously, have given definiteness and precision to metaphysical speculation with reference to purely mental operations, if such there are, and they have given us an intelligible theory of the formation of habits, which, physiologically speaking, are neither more nor less than reflects nervous discharges rendered automatic by their repeated occurrence, until the paths worn in the brain have become, so to say, broad and smooth. The current of nervous energy accordingly takes the line of least resistance. This parallelism extends as far as consciousness enables us to follow it, and no doubt it is still deeper and more far-reaching. It partially explains, perhaps, the well-known and familiar fact that bodily states, experiences and habits, affect the mind, while mental states, experiences and habits, equally affect the body.

Expert treatment is the ideal of the new criminology. The new criminology aims at nothing less than the suppression of evil habits and replacing them by their opposites; in other words, the wearing of paths in the brain which shall offer less resistance than the old, familiar paths; the creation of new habits of thought, speech and action, with or without the consent of the convict himself. This is a task of tremendous difficulty. It is revolution by means of evolution. It is education, in the etymological sense of the word; the education of all the prisoner's faculties, physical, mental and moral, on a well considered, well-grounded plan, scientific and practical at the same time, but differentiated to meet the conditions and needs of each individual case. Kindness must be blended with severity, hope aroused as well as fear, obedience insisted upon and enforced, and above all the good-will and co-operation of the patient enlisted for his recovery. Difficult as the task may be, it is not impossible; but time is essential for its accomplishment. How long a time is uncertain and cannot ever be foretold in advance. The tendency of the parole system is to change the atmosphere of the prison. The convict, when his opposition to our peni-

tentiary discipline has once been overcome, comes to regard it as the abode of hope, not of despair. Sooner or later, he recognizes in the warden a friend, whose strongest wish is to lift him out of the degradation into which he has fallen. When he begins to perceive that it is himself who made war upon society and that society is not his enemy, as he had blindly imagined, his reformation is begun. When he learns the meaning and intention of the law, and becomes reconciled to it, like a wild animal tamed, his reformation is achieved. Affirmatively, therefore, as well as negatively, the parole system is shown to have rational basis.

Let none think that these assertions are the language of a sentimentalist or a visionary. Their truth has been verified by experience.

If a man has been in prison for a term of five years, more or less, it is a momentous instant for him when the guard slips the bolt and he steps out a free man. But if this man was a criminal five minutes before he was discharged from prison, so he is in principle five minutes after; moving the bolt only reshapes his circumstances without doing anything to change the man. Change of circumstance is no index of character. Constructive work in connection with the parole system has first of all to be put into the personality of the man before he leaves the prison; then there must be the effort on his part to reform and do better before the system can help him.

In the operation of the parole system we get to know the man from every standpoint before a movement is made to help him. Then a patron is sought out who will give the man employment, and also take a special interest in his oversight to encourage him in his endeavor to be law-abiding. Through industry and the new-found social environments, a delinquent is made to feel the responsibility of his regaining a social status and becoming a good citizen. Should he relapse into his old ways of living, the license is revoked and the man is returned to prison.

In the ordinary affairs of life men everywhere seek the causes which produce effects. Men are called into being, live their lives and pass away in obedience to natural laws which are as immutable as the movement of the tides. In the evolution of our penal administration the defect of the born cripple, the idiot, the insane, is no longer charged to the poor victim who, unhampered by the world, still has a burden as heavy as should be given any mortal man to bear. It is not very long ago that a world about as intelligent as our own, believed that disease,

deformity and sin came from the same cause—some sort of an evil spirit or genius that found his abode in man. The way to destroy the evil spirit was to destroy the man. Our penal systems have undergone a tremendous change. The paramount purpose of all effort in the federal institutions is to "correct with punishment."

It is necessary at times to be severe in our treatment of the criminal, but never unrelenting. While charity sustains the heart, science and religion must govern the mind. They are indissolubly joined in the treatment of the criminal classes. With these two elements in a man's makeup, the spectres of pessimism which generally haunt the background of our efforts will vanish.

Better than any clamor or system for the cure of crime is the purpose of prevention. For if the cure is the voice of the past, and to suppress is the command of temporary physical force, to prevent must be the divine whisper of spiritual power. Prevention did not begin soon enough to entirely prevent crime. To prevent crime, as in preventing ill-health, we should begin at least a century before the criminal is born. We are just beginning to approach an ideal by insisting upon better homes for the poor and vicious; by child-placing in well selected homes, and by the provisions of the juvenile court. While even these excellent agencies cannot effect those whose early life is not touched by their beneficent influence, yet preventive measures may be applied to them at any point of the progress downward, and keep them from drifting further.

Has society the right to punish a feeble being and not try to rescue and correct it? To extend to a wayward one the friendly hand to help it in its distress to forget, and make it forget, the past blemish and taint; to make into a good citizen one who might become a useless and dangerous being; is not only to serve the highest and truest interests of one's country, but it renders a lasting and beneficial service to humanity.

Chastisement to the delinquent without a possibility of a parole or pardon and forgetfulness, discourages and degrades; while the hope of rehabilitation provokes to effort, and restores.

THE TRUE SIGNIFICANCE OF ONE SPRING FEVER—A STUDY IN PATHOLOGY AND TREATMENT.

BY WOODBRIDGE HALL BIRCHMORE, M.D., BROOKLYN, N.Y.

Had a man come to me within a year following my graduation as a doctor of medicine and had said to me: "Doctor, I do not know what ails me, but I think that I have 'spring fever,' I cannot think of anything else it can be," I might have been foolish enough to have laughed with him, and, like him also, to have taken the matter as a joke; but now that I am an older man, not without that experience in life which age must bring, I believe that I am wiser, and I know that I should study my patient and his symptoms with the utmost care before I replied, and with much patience and more care before I laughed. Why? Because, partly with, and in part because of, the lapse of time, I have learned how serious may be the *moral consequences* of this obscure illness, this hidden malady, and how destructive its results may be to the moral, mental, and physical well-being of the patient if the true bearing of this illness is mistaken, its true significance misunderstood. Twenty-three years brings some experience to every man, and increases mightily his breadth of view, and this increase sometimes enables that man to see, to understand, even it may be relationships, otherwise than by experience not to be discovered, no matter how good may be the will to do one's best, no matter how intense the application of this will. With this increased experience and this broadened field of view, which only time can give, a man comes clearly to appreciate analogies, which otherwise he cannot see, even darkly as in a shadow, much less can he understand and profit by them.

The possible meaning of this strange nervous disturbance, and the incidentally learned best means of meeting it, is one of the lessons only time can teach, and time only by giving an opportune experience.

Definition.—The words, this name "spring fever," came into medical nomenclature as *Febris vernalis*, when a number of diseases were recognized only as being fever, or it may be "fevers," when the pathology of the day recognized its spring and autumn fevers, as it did its "mid-summer madness" and its winter's rheums, without a hope of diagnosis between two

or more seasonal fevers, or it may be without a dream that such diagnosis was desirable, needful even, or possible, yet the experience of Morton called this *Febris nervosa*. One is tempted to ask why he did so, and how he came to give so good a description of it.

If one study with painstaking and care the historic development of pathology, much can be learned about "spring fever," or, as it should be phrased, "the spring fever." In the ages when the nomenclature and pathological knowledge, at present those of the village "wise woman," were the nomenclature and pathological knowledge of the highly-paid "physicianer and chirurgeon," resident at the great house, the palace, the castle, a man who had been graduated from one or other of the great universities, diagnosis now a duty was an utter impossibility, safe concealed in the womb of the ages. But many of the forms of disease, which the writers, who dated their books in the years three centuries since, considered as important, have certainly no known existence now, and if the pathological picture which I have in mind was at that time seen we may safely say that it was not at that time differentiated, except, possibly, by one or two exceptional individuals, such as Morton. In what sense then are the words "spring fever" used for our present purpose? What is the pathology of the symptom picture which we have in mind?

The words, "spring fever," are used in this paper to designate a peculiar condition of the nervous system, more or less pronounced in the various cases which occur during the sudden hot spells of the spring months, usually after April 20th and before June 8th; these dates are the earliest and latest of which I can obtain any information of its occurrence, confined almost wholly to very able-bodied young men, between the ages of seventeen and (assumed) twenty-seven years, whose lives have been active and chaste. The chief subjective symptom appears to be a sense of inability to dare or to do, coming upon the patient suddenly, and resulting in a condition, fortunately, very transient, but during its manifestation not unlike *mental collapse*. The chief, and to practical purpose the only, objective signs are a slight fever, and irritability of the nervous system almost beyond belief. So curiously intense is this irritability that a man, to whom under ordinary conditions nerves would appear to belong only in the sense in which might belong to a bull's possession of them, will start at a sudden sound, make ill-judged and faulty movements, of the pattern, style, manner or method associated in our minds with fragile young woman-

hood, and young womanhood's exhibitions of ineffectual mobile impulsiveness.

There is something pathetic and woeful in the nervous unsteadiness of the able-bodied young man, which is wanting to exhibitions of this condition in his sister, but it reaches its climax when to the complaint of nervous irritability and muscular weakness is added a quiver in the vocalization, and that empty, meaningless giggle, which is not laughter, bears no burden of mirth, but rather the load of its relation to the laughter akin to tears, which is so often a characteristic of the insane. True, it may be that laughter and tears are never far apart, but the association becomes unnerving, horrific, paralyzing, when they begin to mingle—in the man.

Nor is this picture overdrawn, fortunately it is not often seen, but to see a man who might fittingly pull stroke in a "varsity 8-oar," sit squirming and giggling, in constant futile movement, with hands and feet ashaking, is a picture associated, but incongruous; it is "the plaudits of the populace with the reversed thumb threatening in the background." As I have said, this picture is not often seen, and yet I have seen it often enough to know that in cases of lesser degree and more moderate development it might be noted more frequently than it is; were all the cases recognized, it seems to me, its pathology would be perfectly well-known, which I must suspect is not the case.

Symptoms.—One special example, every feature distinctly marked, I well remember; the phenomena were characteristic, the case was typical in every way. The young man was about twenty-three years old, six feet two inches in his stockings, and big accordingly. A civil engineer by profession, he was employed by the contractors building a big bridge; to supervise some part of the construction, just what part I do not know, he was in the habit of going about the structure, walking on the flange of an I beam as steadily as the most of men upon the pavement. Three days before he had waved his hat to me as I rode by, while he was standing nearly one hundred feet above my head on an ascending beam swinging in mid-air while the steam derrick was hoisting this I beam into place, and now he sat on a chair in my library giggling and grinning as if he were a candidate for sequestration in an asylum for the insane, as in truth he soon would have been if the equilibrium of his nervous system had not been presently restored.

His account of the matter was clear enough; he had been "all right" until about two days before, when, in the afternoon of Wednesday (as it might be), he began to "feel weak and

light-headed." He said, as I remember, "for the first time in my life *I was afraid of my job*. I was afraid to go anywhere, and I had lost my nerve somehow. I know that I am as strong as ever, and yet I feel no confidence in my strength. I am feverish, and I do not believe that I slept ten minutes last night, nor an hour the night before. I assure you that this thing has got to stop or I am done for professionally," and then he began to laugh in a high falsetto, horrible to hear, impossible to listen to.

His temperature was 99.8 degs. F. Respiration was 18 irregular, jerky; without being interrupted, it had distinctly lost its normal rhythm. The pulse was widely irregular, phenominally unrestrained. Sitting beside him on the sofa, stop-watch in hand, I counted a number of "hundreds" of beats. The notes give the following—the unit is "one hundred pulsations": (1) 73.2 sec., (2) 52.6 sec., (3) 63.2 sec., (4) 6.82 sec., (5) 77.9 sec. Between the beginning of the first count and the end of the fifth, 16 min. 12 sec. elapsed, of which time 5 min. 35 sec. of pulse-beats were actually counted. This irregularity was quite distinctive, and actually may be called characteristic of the state under discussion; much greater irregularity would appear at times, as this was conditioned by the subject of conversation.

Careful examination was made to determine the condition of the reflexes—some are noted as diminished, others as increased; the net result is stated as "unsatisfactory." His bowels were *not constipated*, indeed, with his life methods constipation would have been inconsistent with his superabounding health, but he complained bitterly of the distress caused by a sudden enlargement of the scrotum, the sense of heat and the irritability which caused a condition suggesting slight priapism.

It would have been simply impossible not to notice his nervous condition; not only were his fingers in constant motion, but his hands were grasping the arm of his chair and letting go again *rhythmically*, therefore *avolitionally*, for *only with much practice is a volitional act made rhythmical*.

Without going further into details enough has been said to show that this young man was badly "disorganized," and that the disorganization of the nervous impulse-reflexes was specially noteworthy.

Secondary Conditions.—Granting that this young man was decidedly ill and was in a seriously nervous condition, one could readily infer that the moral consequences of this nervous disturbance would be likely to be as serious as the physical

ones, and the moral consequences in such cases are usually conditioned by certain essential, but not obvious, facts in the environment.

In the first place, this young man was to be looked upon as a "parcel of stored energy," to use the most apt phrase of Stokes. For the past six months he had been living on a diet the same as that of the "bridge gang," in both quantity and quality, and while he had taken vast quantities of food and had lived in the open air, working in moderate measure, but actively, and exercising every muscle of his body, the effect had not been the same upon his health and nervous system as upon the health and nervous systems of his fellow eaters, who had been doing hard, physical labor, while he had only been "training hard" and now was in "fighting trim." His muscles were like steel for elasticity, and their size and development would have made him a good model for Apollo. But while he was absorbing energy, and storing it up to the point at which hoarding becomes dangerous to the owner of the hoard, he had not been using his strength in any properly proportioned measure; on the contrary, he had by this life method been daily putting more and more work upon the safety-valves and compensating apparatus of his nervous system. The reflexes were amply supplied with the power of action, and one might compare the condition of this young man's nerve-muscle apparatus to that of a pair of horses controlled, but only just controlled, by the hand holding the reins; if the reins were slackened for an instant a runaway follows sure. It would be interesting, had we any possible way of measuring it, to determine the equivalent thermodynamically of the explosive force thus stored in nerve and muscle, ready for use or for mischief, for labor or for explosion. It is my own opinion that the true primary factor in this instability in the nerve-muscle system is the persistent, but to the consciousness invisible, struggle between the two great *internal* forces of our bodies, the direct reflexes and their inhibitions for the control of the *external* forces of the organism. Here, then, was the wildly, furious, forceful, reflex-instinct group, not yet arrayed and inspected by consciousness, ready to break out into open mutiny, but as yet only causing anxiety, not yet rioting. But what had caused all this astonishing exhibition of nervous-muscular disorderliness, this rebellion against the inhibitory system, this demonstration of supernutrition? *Simply a few hot days.* Already trembling in the balance, the work of maintaining the vitality, of keeping up the bodily temperature

had aided the powers of order in disciplining reflex-impulses, but when this work of maintaining the bodily vitality was withdrawn, idleness was added to the difficulty of the environment, in which the normal control of the rhythmical-reflexes and the other forces tending to order found themselves placed. Fortunately, the stimulus of direct physical temptation was not added; opportunity did not lift the curtain, nor brute instinct hint the natural solution to this boy, this young man, as it might have done had he been in different environment, or had he been less clearly-minded. Under exactly these conditions of supernutrition, excited by the heat and impulses of the spring time, I have seen young men seek temporary mates, as irresponsibly as bulls or other males, guided wholly by the sexual instinct; for rational, one might almost say volitional, action was utterly beyond the question. In my judgment this action, in the cases of the young men just referred to, was a pure reflex, wholly avolitional, hardly voluntary, quite without responsibility. The acts essential to the propagation of the species are, no doubt, the natural solution of this problem, the superfluous energy of the individual expending itself in reproduction, *i.e.*, in prolonging the species; that is in the nutrition of the species as distinguished from the nutrition of the individual specimens composing said species; but certainly this solution of the difficulty is not to be encouraged, and in this instance it did not suggest itself to my young friend, or he would not have been my patient for the cause which sent him to me, but might have been for another after a few days, possibly. There had been no one to suggest to him the natural relief to his condition; had there been—there is no use in considering possibilities, there was none.

It may be urged that much of this pathology is speculative; may be, but I do not think so; nor do I believe that any one else will think so who has had an opportunity to watch the phenomena of spring time among man's dependent mammals, the choice individuals of superfluous energy under the specified conditions. An aquarium is an excellent field for observation also, as the conditions of sunlight stimulation can be so easily controlled. Place the cultures in the dark and watch the superdevelopment of the individuals; stimulate them with the sun's heat and light and note the reproductive energy. From the unicellular alga to the very highest articulate, all will obey the impulse of supernutrition, and supernutrition was just the condition in which this young man then was. The cause and character of the young man's condition appeared to me to be

the results of unconscious (inherited of course) reproductive impulsion, caused by the reaction of the environment upon a splendid, thoroughly animal man, in whom the struggle for control of the powers of the organism, as indicated by the individualist will, had produced serious reflex disturbances, and the results of therapeutic effort justified my conclusion. At least so it appears to me.

Treatment.—Plainly the first thing to be done was to relieve the nervous tension. I sent him home to take a cool bath, temperature 80 degs. F., and then to go at once to bed, promising to be with him as soon as possible. I saw him in about an hour; he was in pretty much the same nervous state, but maybe a little less irritable. The temperature was 99.50 degs. F., and the irritability of the pulse and respiration was as marked as ever. Direction was given that during the night he should have sundry doses of an effervescing saline in cold water, and monobromate of camphor was given to allay the special irritation and hyoscyamin to secure sleep. Opium was not to be thought of in this connection, while hyoscyamin appears to act almost specifically, and when combined with the camphor preparation very rapidly. Early in the evening he began to quiet down, and by nine o'clock he was sleeping.

Early in the morning, four a.m., the saline began to take effect, and by breakfast time he had gotten fully awake; to take effect, and by breakfast time he had gotten fully awake; had had a cold bath, shower; been returned to his bed, and now was anxious for the bill of fare. But his eating and drinking was very limited. After eating his breakfast he fell asleep again, and was still sleeping when I saw him at ten o'clock. I wakened him by laying my hand upon his forehead; he opened his eyes *and began to giggle*.

Examination showed that his heart was in better shape than during the previous afternoon; pulse was firm and more orderly, but still rapid; in fact he was apparently in much the same condition as the previous evening, but certainly less "hysterical." The bladder had been emptied three times and the urine saved, rapidly made; artificial sedimentation and microscope examination failed to show any traces of seminal bodies, but the testicles were still swollen and he still complained of distress. If the camphor monobromide had quieted the nervous irritation it had not done anything beyond this, and I was inclined to credit the sleep and any other good results to the cool bath and the large dose of hyoscyamin. Having no confidence in the continued improvement, and firmly believing

hysterical convulsions with their much to be feared moral effect were quite possible, I determined to continue the hyoscyamin and to try the effect of *veratrum viride*, which I knew by observation of the results in the hands of others could be relied upon to diminish the local hyperæmia by its centripetal action. I know that *cannabis indica* has been repeatedly advised in acute hysteria of sexual origin; but, however, useful in women, observation of its results among men when given for other purposes made me doubt the wisdom of using it, and this although it was believed to have done excellent service in a case of this sort in the hands of a friend, who had used it in the form of a cannabin-atropin pillule. (Cannabin 1-50th atrop. sulph. 1-100th grain.)

The preparation of *veratrum* used was, of course, the alkaloid, and the dosage given one-half milli-gramme per hour. Direction was given that the result of the dosage should be closely watched. The restoration began after the fourth dose, the fever and local engorgement of the sexual organs rapidly subsiding. After eight doses had been taken the period between the doses was increased, and effectual steadiness was obtained about eight p.m., when the *veratrum* was discontinued, to be resumed next morning if the condition indicating the need for its use still appeared to exist. The narcotic (hyoscyamin) was continued and he was advised to eat but little. Improvement continued, the giggle and the tendency to rhythmical movements vanished completely in the course of his second day in bed. The morning of the third day he received permission to be up and doing, and in the late afternoon he visited "the bridge," and the fourth morning found him at work.

Of course he was interested in his illness, and so was I, and it was not without surprise that I observed the scanty fund of facts which memory had retained from among the happenings of the day previous to his coming to my office. All the men who had anything to do with him during this afternoon remembered that he complained intensely of the heat and of a sense of hesitation. The foreman of the rivetters said, "I told him the heat had given him spring fever and that he had better go and see you, for the fever might make him 'totty,' and men who get 'totty' on a job like this drop their numbers."

Conclusion.—It would be useless to pretend to anything like satisfaction with my knowledge of this case, the nervous origin of the symptoms and their association in some way with hot weather, high temperature and the seasonal condition of his body, a fund of stored energy, high, nervous tension, the high

temperature, possibly the condition of the atmosphere and some undiscovered sensation. An attempt to explain the symptoms as being the result of an acute ptomaine poisoning appears to me to come from as far afield as my own explanation, a disorderly and distorted manifestation of the sexual impulse. The effects of the treatment appear, in my opinion, to go a long way toward confirming the diagnosis.

That this paper is far from being a finished monograph I of course know, but I know also that a single observed case truthfully narrated, may, when the store of facts is small, be more useful than an attempted monograph which must fail for lack of material to reach the limit of usefulness. The reports of cases of sexual hysteria in the male are not yet so common in periodicals or in big books, but that a small measure of interest can be claimed by the reported case as being a new one.

A radiographic shadow simulating that of a urinary calculus may be produced by an atheromatous plaque, as, for example, in the internal iliac artery, by a phlebolith, or by a calcareous gland.—*American Journal of Surgery*.

Subiodide of bismuth dusted on an oozing granulating wound promptly stops the bleeding. It is also an excellent stimulant to the growth of epithelium.—*American Journal of Surgery*.

Collodion, commonly used to seal a puncture wound, as after aspiration, will not adhere if the spot is wet or bleeding. To obviate this, pinch up the skin, wipe it dry, apply the collodion and continue the compression a minute or so until the collodion has begun to contract.—*American Journal of Surgery*.

The history of a discharge from an ear appearing a few days to a few weeks after the beginning of a slowly developing deafness in that ear, unaccompanied at any time by pain, is suspicious of tuberculous otitis media.—*American Journal of Surgery*.

AN ACT REGULATING THE MANUFACTURE AND SALE OF PROPRIETARY AND PATENT MEDICINES.

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. Each and every box, bottle, pot, phial, package, parcel or other enclosure containing what is commonly known as a proprietary or patent medicine, or article of any kind, or in any form intended for internal consumption or external use by human beings (other than a medicine or article specially compounded upon the written order or prescription of a properly qualified medical practitioner and actually issued by him in good faith in his treatment of an individual patient) which shall be hereafter manufactured within this Province or which shall be manufactured without this Province and exposed or offered for sale, or sold, or given away, or otherwise disposed of within this Province shall have and contain both on the outside wrapper of such box, bottle, pot, phial, package, parcel, or other enclosure and also on a label which shall be affixed to such box, bottle, pot, phial, package, parcel, or other enclosure, in plain English printed in black letters on white paper in type of a size not smaller than "brevier" type a complete schedule showing all the ingredients contained in such proprietary or patent medicine or article and the exact proportion of each ingredient thereof.

2. Whenever any such proprietary or patent medicine or article shall contain more than six per cent. of alcohol or more than one-twentieth of one per cent. of morphine, heroin, cocaine, or of the salts or equivalents or derivatives of the same or any of them, or any quantity of any article named or described in Schedule "A" to this Act there shall be printed in plain English in type not smaller than "brevier" type in red ink on white paper, both on the outside wrapper of such box, bottle, pot, phial, package, parcel, or other enclosure and also on the label affixed to such box, bottle, pot, phial, package, parcel, or other enclosure, in addition to the schedule of ingredients hereinbefore required, the following notice:

"This box, (or bottle, or pot, or phial, or package, or other parcel or enclosure, as the case may be) contains (here give the name and proportion, or percentage of the ingredients above

referred to, as the case may be) and is therefore under the Act *Regulating the Manufacture and Sale of Proprietary and Patent Medicines*, being 6 Edw. VII, Chapter—

“ POISON ”

and also the single separate word “ POISON ” which shall be printed separately on a line by itself in bold face type in red ink and in letters not less than one-quarter of an inch in height.

3.—(1) On or before the first day of November, 1906, every person, firm or corporation who shall compound, manufacture, or assemble any such proprietary or patent medicine or article as described in sections 1 and 2 of this Act shall prepare two accurate sample boxes, bottles, pots, phials, packages, parcels, or other enclosures of the same in the form in which the same is intended to be exposed, or offered for sale, or sold, or given away, or otherwise disposed of, and shall make out a summary in duplicate verified as hereinafter required containing the following particulars correctly stated:

- (a) The name of the person, persons, firm or corporation manufacturing, assembling or compounding the same;
- (b) The laboratory, place or places where, or from which the manufacturing or compounding of the same is carried on;
- (c) All the ingredients contained in the same;
- (d) The exact proportion of each ingredient thereof;
- (e) The fact that the two samples to be deposited concurrently with such summary are substantially accurate samples of the medicine or article described in the summary.

(2) The summary and every duplicate thereof required by this Act shall be written or printed on only one side of the sheet or sheets of paper containing the same.

(3) The summary shall be verified by an affidavit to be made by the person, or one of the persons, or a member of the firm, or in the case of a corporation, the president, secretary, or one of the directors, as the case may be.

(4) One of such duplicate summaries together with the original affidavit verifying the same and the two such samples shall be deposited and filed in the office of the Secretary of the Provincial Board of Health at the Parliament Buildings, Toronto, and upon such deposit the secretary of said Board of Health shall issue a receipt therefor.

4. Every person, persons, firm or corporation, who shall compound, manufacture, or assemble any such proprietary or patent medicine or article as described in sections 1 and 2 of this Act, shall, on or before the first day of February, 1907, and in every year thereafter, make out and prepare a summary and two samples verified by affidavit as provided in section 3 of this Act and shall deposit and file the same in the said office on or before such last named date.

5. The Provincial Board of Health is hereby empowered on the first day of November, 1906, and from time to time thereafter, to make or cause to be made a chemical analysis of proprietary or patent medicines or articles referred to in sections 1 and 2 of this Act, and any person, persons, firm or corporation who keeps the same for sale by wholesale or retail, or otherwise, upon request made in writing signed by an officer or member of such board, shall permit such person as shall be named therein to take away a sample sufficient for the purposes of analysis of such proprietary or patent medicine or article as aforesaid.

6. From and after the said first day of November, 1906, any changes either in the ingredients or in the proportions or percentages of the ingredients in any such proprietary or patent medicine or article referred to in sections 1 and 2 of this Act shall be forthwith reported by the manufacturer or compounder thereof in a summary containing particulars similar to the particulars required under subsection 1 of section 3 of this Act and there shall be deposited and filed two accurate samples of such proprietary or patent medicine or article containing such changes and such samples and summary shall be verified by affidavit and the practice with regard thereto in all respects as required by sections 3 and 4 of this Act shall be followed by such manufacturer or compounder with respect to such changes.

7. No person selling any proprietary or patent medicines or articles referred to in this Act with respect to which medicines or articles the provisions of this Act have not been complied with shall recover any charges in respect thereof in any Court of Justice.

8.—(1) Any person, firm or corporation violating any of the provisions of this Act shall, for the first offence, incur a penalty of \$50 and costs of prosecution and for each offence for which such person, firm or corporation is subsequently convicted of \$100 and costs of prosecution.

(2) Any person, firm or corporation violating any of the

provisions of the 3rd, 4th or 6th sections of this Act shall incur an additional penalty not exceeding \$1,000.00.

(3) Any penalty imposed by this Act shall be recoverable on summary conviction before one or more Justices of the Peace—one moiety of such penalty to belong to the prosecutor, and the other to be paid to the Provincial Treasurer of the Province for the use of the Province.

9. In any prosecution under this Act the production of a certificate purporting to be under the hand of the secretary of, or a member of the Provincial Board of Health showing the last registered summary of the ingredients and the proportions of such ingredients in any proprietary or patent medicine or article referred to in this Act, bearing a name or title similar to the proprietary or patent medicine or article referred to in such prosecution, shall be *prima facie* evidence that the proprietary or patent medicine or article referred to in such prosecution contains all the ingredients and in the proportions set out in such certificate.

10. Section 34 of *The Pharmacy Act* is repealed.

SCHEDULE A.

(Section 2.)

PART I.

Acid, Hydrocyanic (Prussic.)
Aconite and compounds thereof.
Antimony, Tartrate of.
Arsenic and all the compounds thereof.
Atropine.
Carbolic Acid.
Chloral Hydrate.
Cocaine and its preparations.
Conia and the compounds thereof.
Corrosive sublimate.
Digitaline.
Ergot.
Hemp, Indian.
Morphia and its salts and solutions.
Oil, Cedar.
Strychnine and Nux Vomica.
Savin and preparations of.
Veratria.

PART II.

Acid, Oxalic.
Antipyrine.
Antifebrine or Acetanilid.
Antikamnia.
Belladonna and the compounds thereof.
Beans, Calabar.
Cantharides.
Chloroform and Ether.

Conium and the preparations thereof.
Croton Oil seeds.
Cyanide of Potassium.
Euphorbium.
Elaterium.
Goulard Extract.
Hyosciamus and preparations.
Hellebore.
Iodine.
Opium with its preparations, including laudanum, etc., but not paregoric.
Phenacetine.
Pink Root.
Podophyllin.
Potassium, Iodide of.
Potassium, Bromide of.
St. Ignatius Beans.
Santonine.
Scammony.
Stramonium and preparations.
Sulfonal.
Valerian.
Verdigris.
Zinc, Sulphate of.

[This bill was not passed.—ED.]

AN ACT TO FURTHER AMEND THE PHARMACY ACT.

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. Section 26 of *The Pharmacy Act* as amended by 5 Edward VII., Chapter 16, Section 9 is further amended by inserting after the word "person" in the first line thereof the following words "or company incorporated under the Acts in force regulating Joint Stock Companies," and by inserting after the word "title" in the twelfth line of the said Section 26, the following words and figures: "And in case of a company incorporated under the Acts in force regulating Joint Stock Companies, unless each Director of such Company is registered under this Act and has taken out a certificate under the provisions of Section 18 of this Act, for the time during which such company is selling or keeping open shop for retailing, dispensing or compounding poisons, drugs or medicines as aforesaid."

[It is understood this amendment has been passed and requires a majority of directors graduates.—ED.]

Clinical Department.

Two Cases of Operation Involving the Thoracic Duct. By R. BUCKNALL, M.D., M.S., F.R.S.C., Assistant Surgeon, University College Hospital, London, in the *Brit. Med. Jour.*

In the first case now recorded the thoracic duct was accidentally torn open during an operation for the removal of some tuberculous glands from the root of the neck in a man aged 54. The wound of the duct was not recognized at the time of operation, but twenty-four hours later there was a copious flow of lymph and chyle from the wound, and the patient lost strength and weight in a remarkable manner. Plugging having proved ineffectual, the torn ends of the duct were exposed and ligatured on the sixth day. No more fluid escaped, and with the reabsorption of chyle the patient rapidly recovered strength and gained in weight. Two months later, however, he suddenly developed signs of widespread general tuberculosis, and rapidly died of this malady.

In the second case the convexity of the thoracic duct in the root of the neck was caught up in some malignant glands in the posterior triangle, secondary to a cancer of the breast, which had previously been removed. The lumen of the part of the duct involved was entirely obliterated; it was therefore removed with the glands and its free ends were ligatured, without giving rise to any definite symptoms afterwards.

Case I.—A robust drayman of 54, weighing 16 stone, had a solitary tuberculous gland removed from the left side of the neck, because it was breaking down and threatening to point. His wound healed, but two months later it broke down again, and other glands could be felt lower down along the course of the carotid. As they were definitely softening, and the process of infection was rapidly spreading, they were freely removed, and the wound was closed.

After a further interval of two months, the patient again appeared, with a number of glands in the root of the neck rapidly growing and softening, like the ones previously removed. An extensive operation was performed for their removal, and during the course of it some glands were extracted from the lower part of the posterior triangle, in the region of the thoracic duct. The wound was closed and the patient very rapidly recovered from the effects of the anaesthetic, as he had always

done after the two previous operations. Instead of progressing, however, and rapidly recovering his strength, as he had formerly done, he complained of weakness at the end of twenty-four hours, and sank back in bed, apparently very exhausted. It was then noticed that the dressing was soaked with a large quantity of clear, yellowish fluid, and on exploration similar fluid was seen to be oozing rapidly from the wound. The wound was opened up and plugged for five days, with a view to checking the discharge. The plugging proved of no avail, however, and from two to three pints of fluid leaked away every day, at times slowly, and at times more rapidly, clear and thin on the whole, but definitely chylous after meals. The fluid coagulated in the wound, coating its surface so as to look like pneumonic lymph on the surface of the lung. The patient lost strength in a remarkable manner and grew visibly thinner, so much so that it was obviously imperative to check any further leakage without delay.

On the sixth day, after a feed of cream three hours previously, the wound was carefully cleaned and explored and the torn duct found. A large area of the convexity of the duct was missing, and the two ends could not be sufficiently approximated to permit of an end-to-end anastomosis. The free ends of the duct were severally ligatured therefore. The end connected with the innominate vein did not leak; the one emerging from the thorax, on the other hand, discharged chyle and lymph freely until the ligature was applied. The ligature on the latter was so placed that the jugular lymphatics still discharged into the ascending trunk of the thoracic duct. Chyle could therefore pass from the duct into the jugular lymphatic vessels, unless prevented by the valves. After ligature no more fluid leaked from the wound, and the reabsorption of the chyle was at once evinced in two ways:

1. The patient at once recovered his strength and spirits and put on weight.
2. The tissues of the head, face, and neck became oedematous on both sides, having a yellow tinge, as though the chyle were passing from the thoracic duct to the right lymphatic trunk, via the lymphatic anastomosis, between the left and right jugular lymphatics.

The patient soon left hospital with the wound healed, and the oedema of the head and neck rapidly vanishing. He improved for a short time, and then other glands formed in the neck, and two and a-half months later he died, having rapidly developed all the signs of general tuberculosis. *Post mortem*, the cervical,

mediastinal, and other glands were crammed with miliary tubercles, which were also present in large numbers in the lungs, liver, kidneys, spleen, peritoneum, and pleura.

Case II.—The second case was that of a woman of 62 whose left breast and axillary contents had been removed for cancer two years previously. She complained of an excessively painful lump in the left posterior triangle which was evidently fixed to deep structures, but which demanded removal owing to the great pain it caused.

The lump consisted of a mass of cancerous glands, involving the thoracic duct and obliterating its lumen. It was removed with adjacent structures, and the free ends of the thoracic duct were ligatured.

There were no immediate or remote symptoms of any kind referable to the duct, and the patient lived two and a half years afterwards, and died of internal recurrences in the lungs.

The second case is merely of interest as an instance of the fact that gradual occlusion of the thoracic duct, even when complete, does not as a rule give rise to any symptoms, the chyle reaching the blood stream by means of anastomoses, particularly with the right lymphatic trunk.

The first case is of interest in several ways.

1. As an example of the extraordinary loss of strength and energy which occurs when the chyle is allowed to leak away owing to a wound of the thoracic duct.

2. As an example of the equally rapid restitution which occurs as soon as the leakage is stopped and the chyle is again absorbed.

3. As an instance of the fact that the chyle may be efficiently absorbed, even when the main thoracic duct is suddenly and completely occluded.

4. As affording some evidence that the chyle under pressure may ascend the left jugular lymphatic trunk, in spite of the valves present, and so by anastomosis reach the right jugular trunk and enter the right innominate vein.

5. The case is a curious example of tubercle beginning and pursuing a rapid course in the glands of an apparently robust adult, in spite of very radical treatment.

6. It is also possible that the attack of general miliary tuberculosis, which proved fatal, may have been due to organisms entering the blood stream from the neck wound, via the torn thoracic duct. Its onset, within two months of the accident, its rapid course, and the fact that the tubercles present were of the miliary type, all bear out this suggestion.

It may be stated, in conclusion, moreover, that the glands removed at the second and third operations were examined microscopically and by means of inoculation to ascertain their true pathology, as a possible diagnosis of actinomycosis had been suggested, owing to certain peculiar features present. Both sets of glands afforded ample evidence of tubercle by both methods of examination, and the tubercles removed *post mortem* similarly afforded conclusive evidence.

From a practical aspect the case is of some importance in view of the difficulty of either performing an end-to-end anastomosis when the thoracic duct is torn, or of grafting the proximal end into a vein, as some have suggested, for it shows that the far simpler operation of ligature does not of necessity lead to any untoward results, as might otherwise be expected.

An Unusual Case of Sunstroke. J. G. JONES, M.D., Vincennes, Ind.
in the *Jour. A. M. A.*

I report this case because of the extreme rarity of sunstroke in this region during the autumn months, when the temperature usually ranges in midday from 78 to 88 F. in the shade, and also to demonstrate the occasional excessive susceptibility to an attack of sunstroke by an individual who has previously been stricken.

Patient.—A well-developed girl of 11 years of age, always in good general health, had been suffering with slight headaches for a few days previous to the attack. She had until recently been an inmate of the County Orphans' Home, when she had been taken for trial by some country people with a view to adoption. Her parentage history was rather obscure.

History. On September 15th, 1905, at 11 a.m., the patient was standing near a tree in a garden on the hillside only partially exposed to the solar rays, awaiting the return of her companion. This individual returned within two minutes after leaving the girl to find her fallen to the ground and unconscious. The girl was carried to a neighboring farm house, where I saw her within three-quarters of an hour after the attack.

Symptoms.—The patient was in a deep coma; rectal temperature, 107 F. The skin was dry and flushed; pulse, 133 a minute, full and bounding; respiration, 33, irregular and deep. Clonic spasm of abdominal and respiratory muscles was brought on by touching the patient; in the intervals the muscles relapsed into flaccidity. Urine examination was negative. The eyes

were suffused and staring. The pupils were widely dilated and remained in that condition for an hour, after which they contracted down to pin-point size, gradually reaching normal within another half hour. In short, the classical symptoms of sunstroke of the hyperpyrexial form were present.

History of Previous Attack.—On inquiry, I found the history of a previous attack of unconsciousness while at the Orphans' Home during the summer of 1904, but could get no information as to what the diagnosis had been, yet, from the description given, I am sure it was a sunstroke. I excluded, with fair satisfaction, all the causes of coma, except sunstroke, and even with this negative diagnosis added to so classical an array of positive symptoms I found it difficult to accept that diagnosis, for the day was pleasantly cool, with a temperature of only 85 F. in the city at noon.

Treatment.—The treatment was very simple. The child was kept for several hours in a cold pack, with an ice bag at the head. Frequently changed cloths rung out in cold water were applied over the abdomen and precordial region, with an occasional rectal injection of cold water. Consciousness returned two hours after the attack, accompanied by some nausea. The temperature returned to normal by lysis within twenty-four hours, with no remission. There was complete recovery from the prostration in three days.

Remarks.—Some authorities speak of the pupils being contracted in sunstroke and consider this one of the diagnostic points, but it is my experience that they are nearly always first dilated for from 20 to 60 minutes and then contract to "pin point," where they remain for a variable period.

A Case of Total Alopecia Following the Use of Cantharidin.

P. FREDERIC BARTON, M.B., B.C., Cantab in *The Lancet*.

On December 23rd, 1904, I was consulted by a young man for a small bald patch on the back of his head of the size of a shilling. At the edge of the patch there were a few short hairs but microscopically no spores could be detected in them. As the macroscopic appearances were rather those of tinea than alopecia areata the patch was painted on the 26th and 30th with liquor vesicatorius. On January 7th the patient complained of a swelling round the patch and by the 14th the scalp and face were enormously swollen and pitted deeply on pressure. He could not see out of his eyes and the swelling extended down the

neck to the upper part of the chest. By the 16th there was a slightly raised rash from head to foot and blood was present in the urine. Early in February the hair began to fall out, first on the head, then over the rest of the body, until it was completely lost, including axillary and pubic hair. Shortly afterwards his nails fell off. At the present time (October, 1905) there is no sign of the hair returning but the nails have reappeared. The patient has been in excellent health all the time. Both before and after this particular case the bottle of liquor vesicatorius had been in constant use with perfectly normal results.

I cannot find any record of a similar case after the use of cantharidin but doubtless it is due to an idiosyncrasy of the patient. He has been seen by three eminent skin specialists and their prognosis is, on the whole, favorable as the nails have returned and apparently the hair bulbs have not been destroyed. The case, however, appears to be so uncommon that any treatment is of doubtful utility.

A Case of Motor Aphasia Without Agraphia. BYROM BRAMWELL in the *British Medical Journal*.

The case is reported by Byrom Bramwell, whose patient was a married woman, aged 27 years. The aphasia was purely motor. Certain defects in writing in the early stages of the case were clearly due to defects in manipulating the pencil and not to a true aphasic defect. The onset of symptoms was sudden, due to either embolism or hemorrhage. In favor of the former are adduced the patient's age, a mitral stenosis, the sudden occurrence during a febrile attack, attended with sore throat and phlebitis, and a very brief coma at the outset. The embolism probably affected the left middle cerebral artery or some of its branches, but the loss of sensation on the right side of the face, the right deafness and anosmia, suggest, perhaps, a lesion of the posterior end of the internal capsule. Against this localization is the fact that the leg was much less paralyzed than the arm and face. So far as the paralysis is concerned, and on the assumption that embolism of the left middle cerebral artery existed, the lesion would appear to have been both cortical and subcortical, a softening of the left motor area at its lower end. For two weeks after the onset of symptoms, the patient uttered no spoken word, though she tried to do so, but she was taught in due time to repeat vocal vowel sounds, and gradually recovered the power of speech. The author knows of no other case in which such complete motor vocal aphasia was associated with such perfect ability to write.

Proceedings of Societies.

BRITISH MEDICAL ASSOCIATION, AUGUST 21 to 25, 1906.

SECTION OF MEDICINE.

President, Sir Thomas Barlow, Bart., K.C.V.O., M.D., London. Vice-Presidents, Professor Alex. McPhedran, M.B., Toronto; Professor James Stewart, M.D., C.M., Montreal; Alex. Napier, M.D., Glasgow; Wm. Calwell, M.D., Belfast.

PROVISIONAL PROGRAMME.

The following subjects have been selected for discussion:

Tuesday, August 21st.—A discussion on "Blood Pressure in Relation to Disease." The subject will be treated under the following headings: (a) "Physiological Introduction," by Dr. Dawson (Baltimore); (b) "Clinical Methods of Investigating Blood Pressure," by Dr. G. A. Gibson (Edinburgh); (c) "Pathology and Therapeutics of Morbid Blood Pressure," by Sir Wm. Broadbent. The following will also take part: Dr. MacKenzie (Burnley); Sir James Barr, Dr. Janeway (New York), and others.

Wednesday, August 22nd.—A joint discussion with the Physiology Section on "Over-Nutrition and Under-Nutrition, with Special Reference to Proteid Metabolism," to be opened by Professor Crittenden, of Yale.

Thursday, August 23rd.—Papers on "Heart Block," by Dr. MacKenzie (Burnley), Dr. G. A. Gibson, Dr. Erlanger, Professor Osler, and others.

Friday, August 24th.—Papers.

ROBERT DAWSON RUDOLF, M.D., M.R.C.P.,
396 Bloor Street West, Toronto.

JOHN TAYLOR FOTHERINGHAM, B.A., M.D.,
20 Wellesley Street, Toronto.

ROBERT HUTCHISON, M.D.,
22 Queen Anne Street, London, West.

} *Hon. Secs.*

Physician's Library.

The Physical Examination of Infants and Young Children.

By THERON WENDELL KILMER, M.D., Adjunct Attending Pediatricist to the Sydenham Hospital; Instructor in Pediatrics in the New York Polyclinic Medical School and Hospital, New York; Attending Physician to the Summer Home of St. Giles, Garden City, New York. Illustrated with 59 half-tone engravings. 12mo., 86 pages. Bound in Extra Cloth. Price, 75 cents, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

It is not every doctor who is a success in the practice of pediatrics; probably in some cases they do not care or do not try. Success, however, in the careful and thoughtful management of children often leads to a large, general, lucrative practice. This little book is replete with practical matter, and will be found helpful, especially by the young. Many methods of gaining knowledge by physical diagnosis are aptly illustrated.

Nursing in the Acute Infectious Fevers. By GEORGE P. PAUL,

M.D., Assistant Visiting Physician and Adjunct Radiographer to the Samaritan Hospital, Troy, New York. 12mo of 200 pages, illustrated. Philadelphia and London: W. B. Saunders Company. Canadian Agents, J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1906. Cloth, price, \$1.00 net.

It is evident to us that Dr. Paul has written his book on Fever Nursing especially for the nurse and with a knowledge of the subject that can have been gained only by intimate association with routine hospital work. The care and management of each fever has been accorded special attention, as these subjects are of particular interest to the nurse. The author has divided his work into three parts: The first treats of fevers in general; the second of each fever individually; the third deals with practical procedures and information necessary to the proper management of the various diseases discussed, such as antitoxins, bacteria, urine examination, poisons and their antidotes, enemata, topical applications, antiseptics, weights and measures, etc. Altogether, it will be found that Dr. Paul has rendered a valuable service, not only to the nursing, but also to the medical profession, as much of the information given is not without the frequent needs of the general practitioner.

The World's Anatomists. Concise Biographies of Anatomic Masters from 300 B.C. to the Present Time, whose Names have Adorned the Literature of the Medical Profession. By G. W. H. KEMPER, M.D., Professor of the History of Medicine in the Medical College of Indiana, Indianapolis, Ind. Revised and enlarged from the original serial publication in the *Medical Book Notes*. With eleven illustrations, nine of which are portraits. Philadelphia: P. Blakiston's Son & Co.

The title page as above, sets forth what this little volume is and whence it came. It is nice and interesting always to know something of those who have left the imprint of their names on medical literature. Anatomy seems full of these names; and who was Poupart, when did he live, what did he do, are answered in this timely brochure.

A Text-Book of Materia Medica, Therapeutics, and Pharmacology. By GEORGE F. BUTLER, Ph. G., M.D., Associate Professor of Therapeutics in the College of Physicians and Surgeons, Chicago. Fifth edition, thoroughly revised by SMITH ELY JELLIFFE, M.D., Ph. D., Professor of Pharmacognosy and Instructor in Materia Medica and Therapeutics in Columbia University (College of Physicians and Surgeons), New York. Octavo of 694 pages, illustrated. Philadelphia and London: W. B. Saunders Company. Canadian Agents, J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1906. Cloth, \$4.00 net; Half Morocco, \$5.00 net.

For this fifth edition Dr. Butler's text-book has been entirely remodeled, rewritten, and reset, bringing it in accord with the new (1905) Pharmacopeia. All obsolete matter has been eliminated, and special attention has been given to the toxicologic and therapeutic effects of the newer compounds. We notice with much satisfaction that the general arrangement of the book has been so changed that those drugs the predominant action of which is on one system of organs of the body, are grouped together, thus suggesting their therapeutic, as well as their pharmacologic, alliances. We believe this classification to be more thoroughly practical and useful than any other. By use of a more compact type the work has been reduced in size. It is a pleasure to us to recommend this book to the profession, for it is no doubt the most thorough, and in every way the best on the subjects it includes.

The Science and Art of Prescribing. By E. H. COLBECK, B.A., M.D. (Cantab.), F.R.C.P. (Lond.), D.P.H. (Cantab.) Physician to out-patients at the City of London Hospital for Diseases of the Chest, Victoria Park, E.; Physician to the Metropolitan Dispensary; Late House Physician, St. Mary's Hospital, W., etc. etc.; and ARNOLD CHAPLIN, B.A., M.D. (Cantab.), F.R.C.P. (Lond.). Second edition, revised and enlarged. London: Henry Kimpton, 13 Furnival Street, Holborn, E.C.

This is a practical little work for students. Part I. treats of the Prescription: Incompatibility; Method of administrations of Drugs. Part II. has for its title Application of the Methods of Prescribing. That two editions have been called for since 1902 is something to its credit.

A Treatise on Surgery. In two volumes. By GEORGE R. FOWLER, M.D., Examiner in Surgery, Board of Medical Examiners of the Regents of the University of the State of New York; Emeritus Professor of Surgery in the New York Polyclinic, etc. Two imperial octavos of 725 pages each, with 888 text illustrations and 4 colored plates, all original. Philadelphia and London: W. B. Saunders Co. Canadian Agents, J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1906. Per set: Cloth, \$15.00 net; half morocco, \$17.00 net.

We have been looking forward to the appearance of this work with the greatest expectations, for Dr. Fowler's endeavors in the field of practical surgery have been such as to stamp his writings with unquestionable authority. It is not too much, indeed, we feel it is too little to say that our expectations have been fully realized. The work is a masterpiece. It is an accurate, up-to-date treatise on surgery, skilfully presented. This entirely new work presents the science and art of surgery as it is practised to-day. The first part of the work deals with general surgery, and embraces what is usually included under the head of principles of surgery. Special attention is given to the subject of inflammation from the surgeon's point of view, due consideration being accorded the influences of traumatism and bacterial infection as the predisposing and exciting causes of this condition. Then follow sections on the injuries and diseases of separate tissues, gunshot injuries, acute wound diseases, chronic surgical infections (including syphilis), tumors, surgical operations in general, foreign bodies, and bandaging. The second part of the work is really the clinical portion, devoted to

regional surgery. Herein the author especially endeavors to emphasize those injuries and surgical diseases that are of the greatest importance, not only because of their frequency, but also because of the difficulty of diagnosis and the special care demanded in their treatment. Throughout special attention has been given to diagnosis, the section on laboratory aids being unusually excellent. The text is elaborately illustrated with entirely new and original illustrations, and evidently neither labor nor expense has been spared to bring this feature of the work up to the highest standard of artistic and practical excellence.

A Reference Handbook of the Diseases of Children. For Students and Practitioners. By PROF. FERDINAND FRUHWALD, of Vienna. Edited, with additions, by THOMPSON S. WESTCOTT, M.D., Associate Professor of Diseases of Children in the University of Pennsylvania. Octavo volume of 553 pages, with 176 illustrations. Philadelphia and London: W. B. Saunders Company. Canadian Agents, J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1906. Cloth, \$4.50 net; Half Morocco, \$5.50 net.

To those of the medical profession who are acquainted with Professor Fruhwald's work in the original German, it is hardly necessary to speak of the extremely valuable service the W. B. Saunders Company has performed in presenting this English translation. It must be said, however, that the translation possesses an advantage over the original—though it be the work of a leader amongst leaders in pediatric knowledge—in that the editor, Dr. Westcott, has incorporated much valuable matter, the results of his own valuable experience. With a view to making it of special service as a practical reference book, the individual diseases have been arranged alphabetically, with numerous cross-references. This is a novel feature of untold value to the busy practitioner who wishes information quickly. Special consideration has been given to symptomatology, and the prophylactic, therapeutic, and dietetic treatments have been elaborately discussed: especially is therapy treated according to the latest discoveries. The illustrations are practical and therefore excellent, nearly all being reproductions of original photographs and drawings, representing cases from Professor Fruhwald's own clinic. Indeed, we can foresee for this work the same great success in this country that it has achieved in Germany.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

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The Association expects and hopes for the united support of the profession.

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Dominion Medical Monthly

And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVI.

TORONTO, MAY, 1906.

No. 5.

COMMENT FROM MONTH TO MONTH.

Toronto has no need for a second medical college; and those who aspire to professors would do well to place the "pros" and "cons" fairly and squarely before themselves. Without knowing the inside history of the financial management of the late Trinity Medical College, the fact that with 200 students or more, its stockholders decided to seek salvation in the Medical Department of Toronto University, would look as if there were at that time very grave doubts as to its future financial success. Apart from that no one can advance any cogent reason for any hospital or university corporation launching into medical education in this city; and those who would allow themselves to be inveigled into the establishment of any such institution, would, no doubt, be soon repenting at leisure. With an institution which promises to make this city renowned in medical matters, no one who would seek to detract from its future greatness could be called a friend to either higher medical education or to the medical profession at large. In fact, rather than increase the output, and hold out false inducements that there are yet great opportunities in medicine, the quality had better be dealt with; and at the risk of seeming narrow and deterrent, we would strongly advocate that a policy should be established looking

towards an advance of the age limit for graduation; an arts-degree qualification for matriculation; a higher percentage in examinations; the abolition of all piecemeal methods of securing the degree (supplemental examinations); and a year's practical training before actual practice is allowed.

To take these matters up seriatim: There are comparatively few young men whose judgment is matured at twenty-one years of age. It cannot be expected that youthfulness, with its handmaiden inexperience, establishes confidence in either the patient or the patient's friends. Most are little better than boys at that age, full of life and enthusiasm, but lacking in stamina and self-control. The attendance upon human suffering and human ills is a very grave responsibility, a responsibility in which sometimes the best matured and best experienced fail. Three or four years' experience in business, in teaching, or at the university, or in travel, would better qualify most young men on leaving the high school, than immediately embarking on the study of medicine, and right-a-way thereafter graduation entering upon practice. Step by step the matriculation requirements have advanced, but it is doubtful if the requirements for matriculation have kept pace with the requirements for examination. It is certainly shameful and chagrining to see a fellow-student writing "bone," "boune"; "foetus," "feetis"; whilst such a word as "erysipelas" looked like a zig-zag fence. How on earth did a student like this get his matriculation qualification? Most of those graduated from Knox College now-a-days hold the B.A. degree. It is not meant here to discuss nor to parallel the saving of souls with the saving of human life and ameliorating its sufferings, though the two walk side by side. It is merely meant to point out that it would be no hardship upon students of medicine to require this of them, when in another department or profession of life, it is, if not the requirement, at least almost the rule. When a candidate for the M.B. or M.D. degree presents himself for his examinations in all years, he is required to obtain at least one-third, or one-half on each paper, or a higher percentage on the total. A fair set of questions placed before a candidate in an honest endeavor to determine just what he knows of that subject, should look for a far higher percentage than that above. He should be able to satisfy his examiner that he knows from seventy-five to one-hundred per cent. of his subject. Examiners, as a rule, seek to pose as reconditories of abstruse knowledge; and very often apart from their own particular subject, the examined one would be able to meet them on even ground, because:

ripe experience ever brings forgetfulness. The saying is often true that one man has forgotten more than another man ever knew. The day has passed for the supplemental examination, *i.e.*, the piecemeal method of obtaining a degree. In the great majority of instances this only subserves the purpose of idle students, who, enamored of city life and college affiliations, take things easily, hang around and become known as "chronics," mayhap, because the paterfamilias can afford it. Should a candidate fail on one subject, the entire examination should be void, and a new one subsequently prescribed. The foregoing would be a strong policy towards enhancing the value of a degree from the Provincial University of Ontario.

But there is another aspect of the question of making medical education in Toronto something to be more than proud of by the profession, especially of this city; and he is a good citizen and true, he is a good member of the profession and true, he is a good friend of alma mater and true, who will raise not one single objection to the medical students of Toronto University having exclusive clinical privileges in the Toronto General Hospital. In enacting legislation of this character, the Ontario Government simply recognizes the fairness and equity of the proposition, that if the university to which the Province gives so much is to stand pre-eminent with the universities of this continent, and to stand pre-eminent before the eyes of the world, every department must be sustained by a strong arm; and the strong right arm of the Medical Department is exclusive clinical facilities for its students. There is no other university in this Province that can aspire to its position. Whilst those outside the city are, no doubt, doing good work, it may not be too much to hope that in the future decade some scheme of federation may be promulgated between the medical teaching faculties, whereby all will have conferred upon them every advantage which may at present be sought for the provincial university. Until some such scheme be launched, let us hope that not from the ranks of the medical profession in Toronto will emanate any detracting movement which would prevent the Medical Department of the University of Toronto becoming the great, powerful and famous school of medicine, which all should hope it will become under wise administration, and at least with a united, civic profession upholding it.

Science Notes.

A COMBINED undergarment and testes supporter newly invented consists of an undergarment for a man with novel features of construction. There are supporting bands in the garment for the comfortable support of the scrotum and testes, where same is required.

THERE has been established recently in Philadelphia an Infirmary and Laboratory of Pathology for the inmates of the Zoological Garden of that city, through which diseases in wild animals will be studied. Dr. Courtland V. White has charge of the institution.

A RECENT New York invention is a case and stand for surgical and dental instruments. Means are provided whereby the instruments can be effectively treated by an antiseptic solution, and then transferred to any place required for an operation without their being contaminated.

PHYSICIANS who are poultry fanciers will be glad to hear of a new medicated nest egg, which is for the purpose of destroying or driving away vermin, one which does not give off fumes too rapidly. The exudation from this egg takes place slowly and uniformly, and does not therefore endanger the life of the chick.

ACCORDING to Prof. Speiss, in the *Müncher Medizinische Wochenschrift*, pain is the cause of inflammation and not, *vice versa*, as so long believed. When pain is calmed by anesthetics the inflammation in the part subsides. An anesthetic injected into an incipient boil cuts off subsequent inflammation. Prof. Speiss then advocates painlessness in the treatment of all inflammatory processes. Referring to the cessation of the nasal secretion of influenza during sleep, he states, the inflammation of the mucous membrane is arrested by the insensibility of sleep. Thus also he explains the oft-observed healing of wounds in insane persons without inflammation. Applications of ortho-

form before and after operations on the tonsils prevented all pain, as was that following the application of a solution of the same drug to wasp stings, mosquito bites, and slight wounds.

PROF. PIERRE CURIE, who a few years ago became famous through the discovery of radium and other radio-active elements, was run over and killed by a wagon in Paris on the 11th of April. Deceased was a son of a physician, and was born in 1859. He married one of his pupils, a Pole, Marie Sklodowski, when Professor at the School of Chemistry at Paris in 1895. It was the wife who discovered radium. In December, 1903, the couple received the Nobel prize for chemistry.

THE phenomena of the Crookes tube, of Roentgen rays, and latterly of radium, inexplicable by the chemical theories of a decade ago, have rendered necessary the coining of several new words, which have taken their place in the vocabulary of the modern physicist. We hear so much these days of electrons and ions and their relation to the old-time supposedly indivisible atom that the time seems ripe for a few simple definitions condensed from a recent paper by Prof. Soddy. The first and oldest conception of the ultimate unit of matter is the *atom*, the smallest particle of an element capable of separate existence. The essential feature of Dalton's conception was that the atoms of the same element are all exactly alike in mass and every other property, but are recognizably different from the atoms of any other kind of element. The statement will be found in textbooks of chemistry written long before the recent discoveries were foreshadowed, that if it is ever found possible to transmute any one kind of atom, that is, any one kind of elementary matter, into any other kind, there is little doubt that the same means would be sufficient to transmute or decompose the other elements. The modern conception of the ultimate unit is the *electron*, and this, although by origin an electrical conception, is in reality a material conception no less than the atom of matter. The electron could be defined as the smallest existence known capable of isolation and free movement through space. It is a definite amount of "charge" of negative electricity, in a word, the smallest possible amount known to exist; for electricity, no less than matter, had been shown to consist of discrete particles or units, and not to occupy continuously. Unlike the atoms of matter, only one kind of electron is known, consisting of the

same amount or charge of negative electricity with identical properties in all its various manifestations. It is certain that each atom of matter contains in the normal condition at least one electron, which it is capable of losing, and conversely that it may unite with at least one electron more than it normally possesses without deep-seated material change. An atom with one or more electrons less than it possesses in the normal state is positively charged and is often called a *positive ion*. Similarly an atom with one or more electrons in excess is a *negative ion*.—*Scientific American*.

AMONG the causes that contribute to the destruction of books, says an Italian writer, Amerigo Scarlatti, there is one very curious one that may be called bibliophagia. No reference is intended to the mice that once destroyed in England an entire edition of Castell's "Lexicon Heptaglotton," but to human beings, who have literally devoured books. In 1370 Barnabo Visconti compelled two papal delegates to eat the bull of excommunication which they had brought him, together with its silken cords and leaden seal. As the bull was written on parchment, not paper, it was all the more difficult to digest. A similar anecdote was related by Oelrich, in his "Dissertatio de Bibliothecarum et Librorum Fatis" (1756), of an Austrian general, who had signed a note for two thousand florins, and when it fell due, compelled his creditors to eat it. The Tartars, when books fall into their possession, eat them, that they may acquire the knowledge contained in them. A Scandinavian writer, the author of a political book, was compelled to choose between being beheaded or eating his manuscript boiled in broth. Isaac Volmar, who wrote some spicy satires against Bernard, Duke of Saxony, was not allowed the courtesy of the kitchen, but was forced to swallow them uncooked. Still worse was the fate of Philip Oldenburger, a jurist of great renown, who was condemned not only to eat a pamphlet of his writing, but also to be flogged during his repast, with orders that the flogging should not cease until he had swallowed the last crumb.—*Scientific American*.

News Items.

PETERBORO', Ont., is to have an isolation hospital.

The Toronto Emergency Hospital will be closed.

DR. PAGE, Wychwood Park, has moved to Toronto.

DR. W. J. MCCOLLUM, Toronto, has gone to England.

G. S. CLELAND, M.D., Toronto, has been created a coroner.

DR. BRYCE McMURRICH, Bothwell, Ont., is locating in Toronto.

DR. J. W. MOKE, died at McGregor, near Essex, Ont., recently.

DR. ADAM H. WRIGHT, Toronto, sailed for England on the 10th of May.

NEW WESTMINSTER, B.C., is to have a new hospital, at a cost of \$50,000.

ON the 17th of April a new general hospital was opened at Moosejaw, Sask.

DR. BARRETT has been appointed Medical Health Officer for the Yukon and Dawson.

GRACE HOSPITAL, Toronto, is contemplating enlarging itself to the extent of \$200,000.

THE death is announced of Dr. Charles Holden, St. John, N.B., who had practiced there since 1869.

THE Hamilton City Hospital claims the Ontario Government owes it between \$6,000 and \$9,000.

GRACE HOSPITAL, Toronto, admitted 96 patients during April, and had 15 births. There were 4 deaths.

B. ROMILLY JAMESON, M.D., aged 86 years, died at Waterloo, Que., on April 2nd.

DR. L. D. HEBERT, aged 56 years, is dead at St. Antoine Abbe, Chateauguay, P.Q.

THE Nurses' Incorporation Bill before the Ontario Legislature has been withdrawn.

THERE are three hundred and sixty free patients from Toronto in the Toronto Provincial Hospital.

DR. HARVEY CLARE, of the staff of the Brockville Provincial Hospital, has been transferred to Woodstock.

DR. J. F. HALSTEAD, late of Grand Valley, Ont., died at Winnipeg, March 3rd. Deceased was in his 83rd year.

DR. G. GORDON LITTLE, of Windsor, has received an appointment to the home staff of Lakeside Hospital, Cleveland, O.

THE SICK CHILDREN'S HOSPITAL, Toronto, gets the money handed into court, \$2,000, in connection with the Gamey bribery case.

THE death of Dr. Turnbull, of Calgary, is announced. He had been practicing there but six months, having come from Yarmouth, N.S.

THE Vancouver Medical Association has placed itself on record to the effect that in the appointment of a medical superintendent to the new general hospital of that city, a registered practitioner of British Columbia be selected.

DR. FREEMAN, late of the city hospital, Hamilton, has arrived at his destination, Chung King, China. The city is situated on the Yang-tse river, 1,500 miles from Shanghai, and has a population of about half a million.

DR. GORDON BELL, bacteriologist to the Manitoba Government, is reported to have visited the Pasteur Institute at Chicago, fearing hydrophobia, he having pricked his finger whilst experimenting on rabbits with the blood of a dog affected with rabies.

ARRANGEMENTS have been completed whereby women are admitted to study medicine in the Medical Department of Toronto University.

DR. R. C. TALBOT, of Lewiston, Pa., formerly of Forest, was married on Thursday, April 19th, at Lewiston, to Miss Hannah Catherine Hoover.

DR. J. E. KING, who for the last twelve years has been doing a large and successful practice at Thistle town, has sold out to Dr. J. M. Standish, of Georgetown.

SIX years ago the Toronto Western Hospital moved into its present quarters on Bathurst Street. It averages about one hundred patients per day, and is only established ten years.

DR. COLIN A. CAMPBELL, M.R.C.S., has commenced special practice in Toronto, in ophthalmic and oral work. He is located at 55 College Street. Dr. Campbell is an ex-house surgeon of Toronto General Hospital, was in the Pacific service of the Canadian Pacific Railway as ship surgeon, and for the last three years has been senior house surgeon at Moorfield's Eye Hospital, London, England. He is one of five Canadians who has held this position, the others being the late Dr. Buller, Drs. Gordon Byers, Montreal: Burnham and D. N. MacLennan, Toronto. Dr. Campbell, thus equipped with this splendid hospital training, will be a decided acquisition to the ranks of the profession in Toronto.

AT a meeting of the medical men of St. John, N.B., held recently at their rooms in the Market building, it was unanimously decided to form a St. John, New Brunswick, branch of the British Medical Association, and to apply to the general secretary of the association for such a warrant of charter. Dr. Murray MacLaren was elected chairman of the meeting and Dr. J. H. Scammell secretary. The chairman stated the purpose of the meeting, and detailed the advantages of such affiliation. Dr. Thos. Walker moved that the meeting declare itself in favor of forming a branch of the British Medical Association, and that those present pledge themselves to become members of the new branch. Dr. Emery seconded the motion and it was carried unanimously. Dr. G. A. A. B. Addy moved that the secretary obtain the names of those willing to join, and to forward these to the general secretary. The signatures last

night were: Dr. Thos. Walker, Dr. S. S. Skinner, Dr. D. E. Roberts, Dr. M. MacLaren, Dr. P. R. Inches, Dr. F. L. Kenney, Dr. Jas. Christie, Dr. J. F. Bentley, Dr. A. F. Emery, Dr. W. T. McVey, Dr. L. A. McAlpine, Dr. T. D. Walker, Dr. W. L. Ellis, Dr. J. H. Scammell. In addition to these names the application will contain signatures of nearly all the other practitioners in the city, as the idea is very generally favored by the profession. Dr. McAlpine then moved that the name of the branch be the St. John, New Brunswick, Branch of the British Medical Association. This was seconded by Dr. Ellis and carried. The other branches of the association in Canada are at Halifax, Montreal and Toronto. This summer the association meets at Toronto during the month of August.

DR. G. DOUGLAS STANLEY, son of Mr. T. D. Stanley, of St. Marys, has taken a partner, Dr. W. T. Hamilton, to assist him in his increasing practice at High River, Alberta. Dr. Hamilton is a son of Rev. Dr. Hamilton, of Stratford.

A RECENT analysis of Guelph city water by Dr. Amyot, of the Provincial Board of Health, shows Guelph city water to be comparatively pure and free from deleterious bacilli, while of eight samples from wells only one was free from poison.

DR. JOHN M. CAMPBELL, of Brooklyn, N.Y., formerly of Seaforth, and well known in Wingham, has been elected an honorary member of the New York Graduates' Society of the McGill University, Montreal, Canada. The only other person enjoying this distinctive honor is the celebrated Dr. William Osler, of London, England.

Obituaries.

A DETROIT paper of April 9th says: Dr. Hugh A. McEachren, for four years a well-known West Side physician, is dead. Dr. McEachren is a native of Glencoe, Ont. He was a member of the house staff of Harper's Hospital, this city.

DR. ALEXANDER THOMPSON, a former physician of Blyth about thirty-five years ago, passed away recently at his home in Strathroy, in his seventieth year. Dr. Thompson had practiced his profession in Strathroy since 1871, and was highly esteemed by all who knew him. He leaves a widow and four sons, three of whom are also in the medical profession.

ON April 6th, there died in Berkeley, California, Dr. John Bruce MacCallum, second son of Dr. G. A. MacCallum, superintendent of the London Asylum.

Dr. MacCallum was at the time of his death associate Professor of Physiology in the University of California, and first assistant of Prof. Jacques Loeb. He was born in Dunnville in 1876, and after graduating at Toronto University in 1896, he studied medicine at Johns Hopkins University, where he graduated in 1900. During his student career there, and during his tenure of assistantship in anatomy, he completed several investigations in anatomical subjects, which have received general recognition.

DEATH cut short a promising career when Dr. John W. Moak, of McGregor, passed away after a few weeks' illness. Deceased was a brilliant young physician, and had a splendid practice when taken ill. At first he thought it was nothing but indisposition, but finally was forced to keep his room. It was found that he was suffering from nephritis, and the ravages of the disease could not be stopped. Dr. Moak was a graduate of Toronto Medical College, and, after securing his diploma, located in McGregor. He was 31 years old and unmarried. The remains were sent to his old home at Lunenburg, Ont., for interment.

Publishers' Department

THE MODERN MANAGEMENT OF MALARIAL ANEMIA.—One of the most obstinate forms of anemia with which the physician has to contend is that which succeeds malarial infection. This particular form of anemia is, unquestionably, due directly to the structural changes induced by the protozoon parasite. While a mild form of anemia is a common, if not invariable, consequence of malarial infection, there is a severe type, termed *malarial anemia*, which not infrequently occurs. This latter variety usually responds slowly to curative measures; and, since its existence renders the individual a fit subject for recurring malarial manifestations upon the slightest exposure, the importance of its cure cannot be too strongly emphasized. The doctrine of the latency of malarial poisoning in the human body is rapidly gaining in popularity. Some authorities even go so far as to claim that a person who has once been inoculated with the malarial protozoa never completely recovers. Whether this be true or not, it is certain that the protozoon parasite does exert an influence which tends, for a great length of time, to lower vitality and render feeble the powers of resistance to renewed attacks. This is especially true in the case of women, children and persons of advanced age. Recent investigators unite in ascribing the cause of *malarial anemia* to the liberation of hemoglobin from the red corpuscles in the blood vessels. The pigmentation resulting from this liberation of hemoglobin is one of the characteristics of malarial infection. And while the coloring matter may remain in the blood stream, it usually infiltrates into the cells and neighboring tissues. The deposit of pigment is especially great throughout the tissue of the liver and spleen. The thickening and softening of the mucous membrane of the stomach which always attends malarial infection, seems likely to contribute, at least to some extent, to the development of anemia. In every instance the degree of the anemia is in direct ratio to the amount of the hemoglobin liberated from the red corpuscles. And this fact explains the philosophy of effecting repair by the administration of iron, the hemoglobin-contributor. Whether or not the protozoon parasite is ever completely eliminated from the economy remains an unanswered question. But it is now universally conceded that the protracted administration of iron does render the individual partly, if not completely, exempt from a return of malarial manifestations of an aggravated type. Far more so, in fact, than does quinine. Indeed, we have good cause to believe that iron does exert a

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVI.

TORONTO, JUNE, 1906.

No. 6.

Original Articles.

SPASM OF THE PYLORUS.

BY GRAHAM CHAMBERS, B.A., M.B., TORONTO, ONT.

Spasm of the pylorus is a narrowing or closing of that organ, or lengthening of the period of contraction during digestion, and causing obstruction to the exit of the gastric contents. As a result of the spasm the period of gastric digestion is prolonged.

The pylorus takes a very important part in digestion. It is the gateway connecting the stomach, in which the secretion is acid to the intestine, in which the digestive medium is alkaline due to the secretion: succus entericus, bile, and pancreatic juice. To a certain degree it controls both gastric and intestinal digestion; the former by retaining the food in the stomach until the gastric functions are complete, and the latter by regulating the supply of acid chyme.

Since in normal digestion no inorganic acid can be detected beyond the first few inches of the duodenum, the gastric contents, after being emptied into the intestine, must be rapidly neutralized. This is made possible by the working of the sphincter pylori. The pylorus does not remain open continuously, but closes and opens in a rhythmic manner, due, no doubt, to the reflex influences originating in the stomach or intestine.

Experiments by Cannon seem to point to the presence of free hydrochloric acid in the stomach, as a stimulus which causes the sphincter to relax. He was led to this conclusion, principally

by the fact that, although carbo-hydrates of normal reaction leave the stomach very soon after ingestion, yet, when moistened with one per cent. solution of sodium carbonate, depart slowly after the manner of proteids. This conclusion seems almost indisputable. However, it is probable there are other stimuli of pyloric relaxation. It seems to me very probable that the peristalsis of the stomach, particularly of the pyloric region, takes some part in the mechanism of the pyloric sphincter, for gastric peristalsis and propulsion of food into the intestine takes place in the absence of free hydrochloric acid, as in the case of hypochylia.

The stimulus of pyloric contraction is better known. All physiologists, I believe, are agreed that acid in the duodenum is the agent. Its presence not only closes the pylorus, but keeps it closed until the reaction of the duodenal contents is neutral. Then the sphincter again relaxes and the pyloric cycle begins anew.

In addition to closing the sphincter, the acid chyme in the duodenum stimulates the secretion of the pancreatic juice, and to a much less extent the bile. The increase of these alkaline secretions hastens the neutralization of the gastric acid, and lessens the period of pyloric contraction. With regard to the manner in which the acid chyme stimulates the secretion of pancreatic juice, Pawlow held that the acid acted in a reflex manner on the pancreas. However, Bayliss and Stirling have shown that the stimulus of the pancreas is a substance which they have called secretin, produced by the action of the acid of the gastric juice on the mucosa of the duodenum.

Etiology.—In gastric diseases spasm of the pylorus is a very common condition. It may be either primary or secondary, usually the latter.

The primary spasm generally occurs in neurotics, and is occasioned by shock, injury, worry, or by dietetic indiscretion, such as the ingestion of too hot or too cold, or highly irritating food. If peristalsis, such as occurs during digestion, is a factor in the opening of the pylorus, then spasm or diminished relaxation of the sphincter would be necessary results in all gastric affections in which the musculature of the body of the organ is weakened. This is a probable explanation of the attacks of pyloric spasm, which occasionally occur in patients convalescing from infectious diseases, such as typhoid fever.

Secondary spasm of the pylorus is a common occurrence. It is observed in myasthenia gastrica, in ulcer, in hypochlorhydria,

and in acute and chronic hypersecretion. Although in these affections the spasm may be said to be secondary, nevertheless it is an important factor in their evolution. The gastric disease produces the pyloric spasm, and the latter, by causing stagnation of food, aggravates the primary morbid condition. The manner in which the gastric disease produces the spasm of the pylorus is variable. In many cases excessive secretion of hydrochloric acid is, no doubt, an important factor in the genesis, for we have seen that acid in the duodenum is a stimulus to closing of the pylorus, and the greater the secretion of acid in the stomach the longer the period of gastric closure. In asthenia of the musculature of the body of the stomach, in patients recovering from debilitating diseases, such as typhoid fever and influenza, there is frequently stagnation of food, particularly after the ingestion of a large meal. This, together with hypoperistalsis, may be a cause of pyloric spasm, which would lengthen the period of gastric digestion and augment the myasthenia. In ulcer and in hyperesthenic gastritis the spasm may be due to the hyperesthesia of the mucosa, which is usually present in these diseases.

Symptoms.—The principal symptoms of pyloric spasm are stagnation, or retention of food, and the results thereof. The symptoms caused by the spasm, whether primary or secondary, are wholly digestive, vomiting, or the evacuation of the stomach by relaxation of the pylorus, as a rule gives immediate relief.

In primary spasm of the pylorus there are no subjective symptoms as long as the stomach is empty. Shock, worry, or other mental disturbance during digestion, or the ingestion of spices or very cold food may precipitate an attack. The most frequent subjective symptoms are pain, flatulency and belching. Pain when present is usually of a colicky nature, and situated in the region of the pylorus. In some cases, however, it is more diffuse, being felt over the epigastrium, due, no doubt, to accompanying gastrospasm. Flatulency is usually more subjective than objective. The patient complains of a sensation of constriction and of fulness in the epigastrium. On physical examination, however, in many cases no distension of the epigastric region is present. Belching, in some degree, is a common manifestation, as it is voluntarily produced with the object of relieving the gastric distress, even in the absence of flatulency. These three symptoms, pain in the region of the pylorus, flatulency and belching, occurring during digestion, should always suggest pyloric spasm. If in addition the symp-

toms disappear suddenly, either as the result of vomiting, or from some other cause, the probability in favor of the diagnosis becomes greater, and if in addition we are able to exclude ulcer, hyperchlorhydria, hypersecretion, and other conditions in which pyloric spasm may be associated, one is justified in making a diagnosis of primary spasm of the pylorus.

Secondary spasm of the pylorus is a frequent complication of many gastric affections, and takes an important part in the causation of their symptoms. It tends to aggravate the pathological conditions, prolongs their courses and renders treatment more difficult.

In gastric ulcer, especially when the ulceration is situated very near the pylorus, pyloric spasm is usually present. It is due, no doubt, partly to a reflex influence, resulting from the irritation of the ulcer, and partly to hyperchlorhydria, a common functional disturbance in ulceration of the stomach.

Hyperesthenic gastritis, associated with ulceration and ectasia, is another affection in which spasm of the pylorus is frequent. The course of this combination of diseases is very chronic, and its treatment is difficult. As long as food is taken into the stomach the spasm of the pylorus continues. The spasm prevents healing of the ulcer, and increases the gastritis and ectasia. Recently I have seen many cases of this condition. In one, at present under treatment, the disease began fifteen years ago with symptoms of hyperchlorhydria, and since that date the patient has almost continually suffered from distress after eating. About ten years since the patient vomited blood, and was treated for ulcer but without success. At present the principal complaints are pain, flatulency and belching. Vomiting is infrequent. The stomach is dilated, and analysis of the gastric contents shows the presence of excessive mucus and of hydrochloric acid. There are all the signs of motor insufficiency, probably due to stenosis of the pylorus. The subjective symptoms are always worse in the evening. Lavage gives almost complete temporary relief. The stenosis may be due to spasm or to organic change. Although the patient has suffered from a severe digestive disturbance for fifteen years, nutrition of the body is fairly well maintained. Cases such as this are fairly common. Some are amenable to medicinal and dietetic treatment. In these the stenosis must be due to spasm. I may add that on the ulcer carcinoma occasionally arises. The subjective symptoms and functional signs frequently remain the same, except that there is a greater loss of flesh, and in some

cases cachexia. If no tumor is palpable it is impossible to make a positive diagnosis without exploratory incision.

Treatment.—In spasm of the pylorus, whether primary or secondary, the treatment should be both etiologic and symptomatic.

In primary spasm the nervous system should receive special attention, and, if necessary, measures instituted to allay excessive irritability, and to improve its tone and strength. For this purpose the bromides of sodium and strontium are generally useful, as are also, if anaemia be present, iron and phosphates. The dietary is very important. The food should be soothing, easily evacuated, sufficient to support nutrition, and not too voluminous. Of the drugs useful in relieving spasm bromides, chloral hydrate, extracts of belladonna, cannabis indica, and coca, and codeine, are the most useful. These may be administered either by the mouth or by the rectum. Codeine phosphate may also be given hypodermically.

In the secondary spasm of the pylorus we should never lose sight of the fact that in probably every case a vicious circle exists. The primary disease causes the pyloric spasm, and the latter, by causing stagnation of food, invariably aggravates the former. Measures, therefore, useful in primary spasm are also useful here, as they tend to relieve stagnation of food, and thereby facilitate the treatment of the primary disease of the stomach.

On the other hand, in the treatment of the primary gastric affection, we should look upon spasm of the pylorus as a possible factor in the production of the subjective symptoms and in the genesis of the disease. Thus in gastric ulcer, when the lesion is situated very near the outlet of the stomach, there is usually severe pain, and the disease is frequently chronic and difficult to cure. In this condition it is quite probable that spasm of the pylorus is the agent that causes this variation. In the treatment, therefore, due consideration should be given to it. Now, the only way to prevent spasm is to give complete functional rest to the stomach. Therefore, for a period, and in some cases for a considerable period, there should be no ingesta.

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DIFFICULTIES IN MARRYING IN THE UNITED STATES.

BY R. VASHON ROGERS, ESQ., KINGSTON, ONT.

Some people in this virtuous Canada of ours appear to think that in the great Republic to the South any one can get married if "Barkis is willing"; that the entrances into the matrimonial Paradise stand ever wide open; that no flaming sword of the law ever flashes to guard the gates; nay, they think the openings into wedded life are so great and numerous that one may stumble into it unknowingly and without desire.

Far different is the truth: the law oftentimes interposes its rough hand between lovers. This will appear to any one who glances at the marriage laws now in force in the various States and Territories. He will find that in that land of liberty would-be benedicts and brides may have to consider the number of corpuscles coursing through the veins of the desired one, or weigh the brain of the longed for partner, and may be hampered or foiled in their choice by questions of color or nationality, of age, or wealth, or health.

A Missourian Judge after due deliberation has declared that no provision of the constitution guarantees to a citizen the right to marry anyone who will wed him. (*State v. Jackson*, 80 Mo. 175: 50 Am. Rep. 499.)

Let us begin our survey in the East, where wise men are supposed to be.

In Maine no woman can celebrate matrimony unless she is an ordained minister of the gospel, or licensed to preach by some association of ministers, religious seminary or ecclesiastical body and duly appointed and commissioned for that purpose by the governor of the State. In this State a marriage between a white person and a negro, or an Indian or mulatto, is void; nor are paupers permitted to enter the holy estate of matrimony (if in charge of the overseers of the town), notwithstanding the much read and much vaunted Declaration of such self evident truths as "that all men are created equal, that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty and the pursuit of happiness."

In Rhode Island people cannot be married in private, the law insists that some witness must be present to make a marriage

legal; two in addition to the solemnizer. The other New England States do not require such publicity. The legislators of Rhode Island have never encouraged matrimony—like the other New England States have—by providing that illegitimate children may be legitimized by the marriage of their parents.

New Hampshire is the only one of the New England States sufficiently considerate of poverty and modesty to permit a man and woman to become husband and wife without the expense of banns or licence or the performer's fee; in that Granite State two persons living together and acknowledging each other as man and wife and generally reputed as such for three years (or until the death of one of them) are thereafter deemed to be legally married. Yet New Hampshire does not permit free-trade in matrimony, but forbids first cousins to marry. No other New England State prohibits this, though all forbid such unions between aunts and nephews, or uncles and nieces.

In Connecticut a man could not marry his deceased brother's wife until 1816; but he may marry his mother-in-law or a woman her father-in-law. Just fancy this while a wild Apache to avoid meeting his mother-in-law will clamber down a precipice at the risk of his life; a native of New Britain would commit suicide did he accidentally speak of his wife's mother; and an Australian almost died of fright because the shadow of his mother-in-law fell upon his legs while he slept beneath a tree, and a Caffre woman is forbidden to pronounce, even mentally, her father-in-law's name, nor is she allowed to use any word containing the emphatic syllable of his name. This privilege is not permitted in the other New England States; nor in any of them can one be legally united to a step-parent or step-child. Until some years after the beginning of the last century offenders against the law of prohibited degrees in this wooden nut-meg state were "set upon the gallows" and condemned to wear "the scarlet letter," that Hawthorne wrote so well about. In this "land of steady habits" a marriage attempted to be solemnized by an unauthorized person, whether the parties act in good faith or not, is void without decree.

A woman in this State has to wait until she is over forty-five ere she can enjoy the sweets of wedded life if she, or her intended be imbecile or feeble-minded, or a pauper. And this although Judge Deady said, "In this country, at least, it is still open to every woman however poor or humble to obtain a secure and independent position in the community by marriage." (The *Oriflamme* 3 Sawyer (U.S.) 397.)

In old days Mrs. Grundy said that people who were not quite sure that they would find matrimonial bonds easy enough to bear often left a way of escape by employing a sham parson; but no such trial marriages are allowed in Maine, Massachusetts, New Hampshire, Vermont, or Rhode Island, for in all these States the law says expressly that when a marriage has been solemnized by a person professing to be legally authorized, although not so authorized, its validity shall be unaffected by such want of authority, if it be valid in other respects and entered into by the parties, or one of them, in the belief that they were getting lawfully wedded. This is also the law in a great many of the Western States.

In Massachusetts until a few years ago one could be married by any Justice of the Peace; now the privilege is limited and no Justice can unite others in wedlock unless he also holds the office of City or Town Clerk, City Registrar, Clerk of a Court, or that of assistant in either case, or unless he has been specially designated by the governor. This State also insists that no one can perform such a ceremony unless he can read and write the English tongue. The monopoly thus granted to the language of a foreign nation may not be oppressive while the present *entente cordiale* continues, but suppose troublous days like those of 1776 come again; may not some red hot members of Congress again submit "the resolution that the use of the English language be abolished"; and may not our brethren across the line adopt the amendment of Roger Sherman "that we (the American Citizens) compel the English to learn Greek, and keep their language for ourselves."

It has been decided in this State that an entry by a man in his diary, "Hand in hand through life we go and share each other's joy and woe," followed by cohabitation of the writer with the woman spoken of, will not afford conclusive presumption of marriage. (Norcross v. Norcross, 155 Mass. 425.)

In Virginia so long ago as 1780 an act was passed nominally for the purpose of "encouraging matrimony," and yet even at the present day a justice of the peace, as such, has no authority to marry; so too in West Virginia only the religious celebration by a clergyman, according to the usage of a society having no officiating minister, is valid; a lay ceremony is not recognized there by statute. In Maryland parsons still have a monopoly of the matrimonial business, as under the illiberal act of 1777. In Georgia colored ministers of the Gospel, or ministers of the Gospel of African descent, are only allowed to marry freedmen or freedwomen, or persons of African descent.

In all the Southern States (save those just mentioned), and in the South Western States and Territories, one seeking wedlock can have at his option either a religious or a civil celebration before a minister, or a judicial officer.

In Louisiana it is not even necessary for the minister or priest to be a citizen of the United States. Louisiana is strict enough to require marriage to be solemnized in the presence of at least three witnesses all of whom must be of full age; this age limit bears hardly upon bridesmaids.

Oklahoma and Porto Rico only require two adult competent witnesses. Twenty-one of these southern commonwealths and territories do not care whether any fourth person is present or not. However, in the case of Quaker weddings in Maryland the contracting parties must sign a certificate to the effect that they have agreed to take each other for husband and wife and this has to be attested by twelve persons present.

Marriages that would have been good under the old English common law are still valid in Florida.

By a Georgia law any persons of color living together as husband and wife on March 9, 1866, had to sustain that legal relation to each other, unless indeed the man had two or more reputed wives, or the woman more than one reputed husband: if either was so blessed then he or she had to choose one consort and had to be forthwith married. Severe penalties were inflicted in case of refusal. In Georgia "marriage is encouraged by the law."

In Kentucky if a girl in her anxiety to marry does so without waiting until she is sixteen and has legal permission, the court may commit her estate to the care of a receiver to keep so long as the Court sees fit. So too, in West Virginia if the impulsive maiden marries under twelve years of age.

In Porto Rico collaterals by consanguinity may not marry within the fourth degree, unless the Court waives the impediment; first cousins may not marry in Arkansas, Arizona, Indian Territory, Louisiana, Oklahoma, or Missouri; Tennessee is the only state in this part of the Union where such good friends as aunts and nephews, uncles and nieces, are not forbidden to marry. Alabama and Mississippi still prohibit marriage with a step-father or a step-mother. Georgia, Kentucky, Maryland, South Carolina, Tennessee, Texas, both Virginias and the District of Columbia do likewise and, further, will not permit marriage with a father-in-law or a mother-in-law. In South Carolina, if the bride is under sixteen and the

marriage is clandestine, the husband may be imprisoned for five years or fined.

Nearly all the States have rigorous laws to prevent miscegenation; some forbid such marriages to the third generation, others forbid marriage between a white person and an Indian, negro, mulatto, mestizo or half breed. But here comes in the query, what is a negro? In Virginia the Courts have held that if a man has one-fourth negro blood he is a negro, if one drop less than a fourth he is a white man: while in North Carolina a person with one-sixteenth of negro blood in his veins is a negro. Still other States use vulgar fractions to define their meanings and void marriages between a white person and another having one-eighth, or more, of negro, or Mongolian blood; surely to discover these miscolored blood-corpuscles one must be a Sir Hudibras, who,

by geometric scale,
Could take the size of pots of ale:
Resolve by lines and tangents, straight,
If bread or butter wanted weight.

Chinese and Mongolians are in Mississippi and Arizona tabooed almost as strongly as negroes for wedded mates of whites.

In Virginia, Alabama, Florida, Mississippi, and West Virginia approaching nuptials cannot be kept quiet even if the woman holds her tongue, because the licence must be obtained in the county in which she lives; while in Kentucky unless she is of full age or has been led to the altar before, the licence can only be obtained on her personal or written application. How trying this must be to the innate modesty of the sex.

In New York until the nineteenth century had vanished the State steadily maintained the validity of marriage entered into by simple agreement without any formal celebration. For instance it was enough for a man to put a ring on a girl's finger, saying "this is your wedding ring, we are married, I will live with you and take care of you all my life, as my wife," when the parties went and lived together.

But an end seems to have been put to these common law marriages. By the Act of April 11, 1901, ministers of religion, mayors, aldermen, judges or justices of the peace must solemnize marriage (although Quakers and Indians may still marry as was their wont), and any parties if they prefer may marry by a written contract of marriage signed by both and at least two witnesses, stating the places of residence of the parties and the witnesses, and the date and place of marriage, and acknowl-

edged by the parties and witnesses in the manner required for the acknowledgment of a conveyance of real estate to entitle the same to be recorded; such contract to be filed within six months in the office of the clerk of the town or city where the marriage was solemnized.

The legislators of Pennsylvania do not meddle much with matrimonial laws; not more than two or three alterations have been made in the Act of 1701—one made in 1885 expressly authorizes a Quaker man and woman to solemnize their own marriage. Now, as in 1701, the bride and groom taking each other by the hand, are permitted to plight their vows in the presence of at least twelve witnesses, one of whom must be a justice. How much more liberal this is than the English law as laid down in the Rev. Mr. Beamish's case by the House of Lords; or the law of the wee state of Delaware which by an Act of 1780 (which still governs), allows white people to be married only by ministers or preachers of the gospel duly ordained according to the rites and ceremonies of their respective churches (making an exception only in favor of the mayor of Wilmington, who by Act of 1874 is allowed to perform marriages); and this although the Marriage Act says "that sober, discreet and advised unions in matrimony is the duty of every good citizen."

In nearly all the Western States those seeking to enter the matrimonial state can have at their option either a civil or a religious celebration. Some of them require witnesses; for instance South Dakota, like New York, is satisfied with one; but Alaska, Michigan, Montana, Minnesota, Idaho, Nebraska, Nevada, North Dakota, Oregon, Washington, Wisconsin and Wyoming, insist upon two.

Montana and South Dakota have still a peculiar provision for contract by declaration, which practically allows people to celebrate their own marriage and to do so clandestinely if they see fit. Consent alone (they hold) does not constitute marriage; but it is marriage if the consent be followed by a solemnization or by a mutual assumption of marital rights, duties and obligations; consent and subsequent consummation may be manifested in any form and may be proved as any other fact. If there is no solemnization then the parties must make a declaration showing names, ages, and evidence—the fact of the marriage and that it was not solemnized. This law was in force in California until 1895 and gave rise to the famous "contract marriages," of which the Sharon one was the most famous.

In Idaho and California neither party to a nuptial contract

is bound by a promise made in ignorance of the other's want of personal chastity, and either is released therefrom by the unchaste conduct of the other, unless both parties participated therein.

In many of the Western States matrimony is defined to be a civil contract. In Kansas the age of consent for marriage is only fifteen for males and twelve for females; in Iowa, North Dakota and Utah it is sixteen for males, and in North Dakota thirteen for girls.

Because many of the Western States have not thought it necessary to continue the solemn farce of specifically interdicting wedlock with a grandparent or a grandchild, it does not follow by any means that such alliances can be made. Delaware, Iowa, Michigan, New Jersey, Pennsylvania and Washington forbid marriage with a step-parent or a step-parent-in-law, and all the Middle and Western States expressly, or by implication, prohibit unions between aunts and nephews, uncles and nieces. Indiana, Ohio, Nevada, Washington, Illinois, Kansas, Wyoming, the Dakotas, Michigan, Pennsylvania, Oregon and Colorado, forbid first cousins intermarrying. In Alaska marriages are prohibited within the fourth degree of the whole or the half blood.

The children of unions contracted between members of the Church of Jesus Christ of Latter-day Saints born on or before January 4th, 1896, were all made legitimate.

As in the South so in the West the legislators try to check miscegenation by statute, forbidding the marriage of whites with negroes, Mongolians or Indians; the Acts vary in different places.

Delaware forbids the marriage of paupers under a penalty; Michigan enacts severe punishment pecuniary and otherwise upon those who marry when afflicted with certain venereal diseases. Minnesota and Kansas follow Connecticut in prohibiting the marriage of any one who is epileptic, feeble-minded, imbecile or afflicted with insanity, if the bride is under forty-five; but no attempts seem to be made to punish those citizens who evade these salutary laws by marrying outside their state. In many states the age for marriage is twenty-one in males and eighteen for females, but generally all that an uxorious school boy has to do to enable him to wed a school girl friend is to induce her to lay aside her skipping rope for a while and fly with him across the border to a more complaisant State.

(Howard, in his splendid *History of Matrimonial Institutions*, cites all the statutes above referred to.)

AN ACT RESPECTING THE TORONTO GENERAL HOSPITAL

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. This Act may be cited as *The Toronto General Hospital Act, 1906*.

INTERPRETATION.

2. Where the words following occur in this Act they shall be construed in the manner hereinafter mentioned unless a contrary intention appears.

- (a) "The Hospital" shall mean the Toronto General Hospital.
- (b) "The Trustees" shall mean the Trustees of the Toronto General Hospital.
- (c) "Subscribers" shall mean Benefactors and Annual Subscribers as defined by this Act.
- (d) "The Corporation" shall mean the Corporation of the Trustees of the Toronto General Hospital.
- (e) "The Board" shall mean the Board of Trustees of the Toronto General Hospital.

REPEAL OF PRESENT ACTS.

3. Any provisions contained in any former Act relating to the Toronto General Hospital which are inconsistent with this Act are repealed.

INCORPORATION AND ELECTION OF TRUSTEES.

4. Until the appointment and election of the Trustees under the provisions of this Act shall have been made and held, the Corporation shall continue as at present constituted, and thereafter twenty-five Trustees, eight of whom shall be appointed by the Lieutenant-Governor-in-Council, five by the Trustees of the University of Toronto, five by the municipal council of the Corporation of the City of Toronto, and of whom seven shall be elected by the subscribers (as hereinafter provided) shall together be a body corporate by the name of "The Trustees of the Toronto General Hospital."

5. Within six months after the passing of this Act the said municipal council of the Corporation of the City of Toronto

shall appoint five Trustees who shall hold office until the expiration of the year in which they are appointed and until others shall have been appointed in their places; and five shall be appointed annually thereafter in the month of January by the said municipal council and shall hold office during the remainder of the year in which they are appointed and until others shall have been appointed in their places.

Within the time aforesaid the Trustees of the University of Toronto shall appoint two Trustees to hold office from the date of their appointment until the 31st of January, A.D. 1908, two to hold office from the date of their appointment until the 31st of January, A.D. 1909, and one to hold office from the date of his appointment until the 31st of January, A.D. 1910, and shall in the month of January, A.D. 1908, and in the month of January in each year thereafter appoint Trustees in the place of those whose terms of office shall have expired to hold office for three years from the date of such expiration.

The Lieutenant-Governor-in-Council may within the said time appoint two Trustees to hold office from the date of their appointment until the 31st of January, A.D. 1908, three to hold office from the date of their appointment until the 31st of January, A.D. 1909, and three to hold office from the date of their appointment until the 31st of January, A.D. 1910, and may in the month of January, A.D. 1908 and in the month of January in each year thereafter appoint Trustees in the place of those whose terms of office shall expire in that month to hold office for three years from the date of such expiration.

And the subscribers shall within the said time, in the manner hereinafter provided elect two Trustees to hold office from the date of their election until the 31st of January, A.D. 1908, two to hold office from the date of their election until the 31st of January, A.D. 1909, and three to hold office from the date of their election until the 31st of January, A.D. 1910, and shall in the month of January, A.D. 1908, and in the month of January in each year thereafter elect Trustees in the place of those whose terms of office shall expire in that month to hold office for three years from the date of such expiration.

All Trustees whose terms of office shall have expired shall in all cases be eligible for reappointment or re-election as the case may be.

No one at the time being a member of the Hospital Staff shall be eligible for the position of Trustee and if a member of the Board after his appointment or election accepts or occupies a position on the Hospital Staff, or goes to reside out of the

Province, or becomes insane or otherwise incapable of acting as a member of the Board he shall *ipso facto* vacate his office as a member of the Board, and a declaration of the existence of such vacancy entered upon the minutes of the Board shall be conclusive evidence thereof.

Should a vacancy arise from any cause in the Board of Trustees, such vacancy shall be filled by the body possessing power to appoint or elect under the provisions of this Act, and the person appointed or elected to fill such vacancy shall hold office for the remainder of the term of the Trustee whose place he fills.

At all meetings of the Board nine shall form a quorum.

ELECTION OF TRUSTEES BY SUBSCRIBERS.

6. A meeting of the subscribers shall be held within six months after the passing of this Act for the purpose of electing the Trustees to be elected by them under the provisions of this Act and thereafter on the second Tuesday of the month of January, in each and every year in which Trustees are to be elected by the subscribers; and in cases of elections to fill vacancies, at such time as the Trustees may by by-law or resolution appoint.

7. The said meetings shall be held at the Hospital at such hour as the Trustees shall by resolution appoint and the Secretary of the Trustees shall for 10 days at least prior to the holding of any such meeting give public notice thereof in two newspapers published daily in Toronto.

8. The Solicitor of the Trustees or in his absence a person elected by the meeting shall preside at such meeting as chairman and shall call the meeting to order at the hour named in the notice and the Secretary of the Trustees shall act as the secretary of the said meeting and shall produce and lay upon the table for public inspection a certified list of the subscribers with the amount of each individual subscription.

9.—(1) Such election shall be by ballot taken by two or more scrutineers to be appointed by the chairman of the meeting and each subscriber shall at such election be entitled to vote for Trustees, who must be residents of the Province of Ontario. Such vote may be given in person or by proxy under a power of attorney duly executed under the hand of the subscriber, provided that the said power shall be held by a subscriber entitled to vote at such election and shall be valid only for one year, and the persons for whom the largest number of votes shall then be given shall be the Trustees elected.

(2) In case of an equality of votes between two or more persons which leaves the election of one or more Trustees undecided then the scrutineers shall forthwith put into a ballot box a number papers with the names of the candidates respectively having such equality of votes, written thereon, one for each candidate, and the chairman shall draw from the ballot box in the presence of the scrutineers one or more of the papers sufficient to make up the required number of Trustees, and the persons whose names are upon the papers so drawn shall be the Trustees elected.

POWERS OF TRUSTEES.

10. The Trustees shall have, hold, possess and enjoy all the rights, powers and privileges which they now have, hold, possess or enjoy and shall have the usual powers and rights of bodies corporate and shall have and hold every such parcel of land and premises as may have been heretofore granted by Letters Patent, or assigned or conveyed to, or vested in any former Trustees of the Hospital by any Act of the Legislature of the Provinces of Canada, Upper Canada or Ontario, or by any person or persons whomsoever and every such parcel of land and premises as may have been devised to any former Trustees of the Hospital by any person or persons whomsoever or has become vested in any former Trustees of the Hospital in what manner soever; and shall and may be capable of receiving and taking from any person or persons or any body corporate or politic by grant, gift, devise or otherwise any lands or interest in lands or any goods, chattels or effects, which any such person or persons or body corporate or politic may be desirous of giving, devising, granting or conveying to them for the use, support or purposes of the hospital; and the Trustees shall have power to hold and take all lands subject to this Act for the purposes of the hospital without license of Mortmain; and all persons shall have full and unrestricted right and power to give, grant, devise and bequeath to the Hospital any lands and interest in lands or any goods, chattels or effects, any Act or law to the contrary notwithstanding, and no real estate or interest therein vested in the Trustees and used for hospital purposes shall be liable to be expropriated by any municipality, corporation or person for any purpose whatsoever without the consent of the Trustees.

The buildings and grounds of and attached to or otherwise *bona fide* used in connection with and for the purposes of the Hospital, so long as such buildings and grounds are actually

used and occupied by the Hospital, and the personal property belonging to the Hospital, shall be exempt from all taxation.

All the rights and privileges belonging to and enjoyed by crown lands under any statute limiting the time for bringing actions either by the Crown or against the Crown shall be deemed to belong to and be enjoyed by the lands vested in them from the time they were so vested.

11. The Trustees shall have power to sell, dispose of or mortgage any lot or parcel of land and premises vested in them (including the block of land at present occupied by the hospital, and being that block bounded by Gerrard, Sumach, Spruce and Sackville street), upon such terms as to payment of purchase money as to them shall seem best; or to lease the same for any period of time not exceeding twenty-one years with right of further renewals forever, and subject to such covenants, conditions, agreements, stipulations and provisoes as to them shall seem best. Provided, however, that those lands vested in the Trustees which are charged with certain debentures at present outstanding shall remain subject to such charge until the same are paid.

12.—(1) The Trustees shall have the right and they are hereby empowered to acquire, enter upon, take and use all necessary and convenient lands and buildings for the purposes of the Trustees, making compensation therefor to the owners, occupiers and other persons having an interest in the said lands and buildings and may pass by-laws for the said purpose.

(2) For the purposes of the preceding subsection the Trustees shall have all the powers conferred upon municipal corporations by *The Consolidated Municipal Act*, 1903, as to acquiring, entering upon taking and using lands required for the use of such corporations, and, save as hereinafter provided, sections 437 to 467, both inclusive, shall *mutatis mutandis* apply to the Trustees and to the exercise by them of the powers hereby conferred, as if the Trustees had been named therein instead of any municipal corporation, and as if the Secretary of the Hospital had been named therein instead of the clerk of municipality.

(3) Should the Trustees under the powers by this Act conferred expropriate the block of land lying south of the southern limit of College Street, west of the westerly limit of Elizabeth Street north of the northerly limits of Hayter and Christopher Streets, and east of the easterly limit of University Street, or any portion thereof, then those portions of Avenue Street, Avenue Lane, Centre Avenue, Christopher Street and of all

public lanes lying within the said limits, or within the limits of such portion as may be expropriated shall be closed and the fee therein shall be vested in the Trustees.

(4) Instead of the arbitrators appointed by or for the respective parties or the Court naming the third arbitrator, the Senior Judge of the County Court of the County of York shall be the third arbitrator in all arbitrations held under this Act.

(5) The Trustees may register any by-law passed for the purposes of subsection 1 of this section by depositing in the proper registry office, a copy of such by-laws certified under the hands of the chairman and the secretary of the Trustees and authenticated by the seal of the corporation and the registration by them of such by-laws shall vest the lands therein described in the Trustees; for such registration the registrar shall be entitled to fees upon the scale provided in paragraph 1 of section 118 of *The Registry Act*.

13.—(1) It shall be lawful for the Trustees and they are hereby authorized from time to time to borrow for the purposes of the Hospital such sum and sums of money as they may lawfully require for the purposes of the Hospital and to issue a debenture or debentures for the raising of such loan in such sum or sums at such rate of interest and for such period or periods as the trustees may find expedient; provided always that no such debenture or debentures shall be issued for a longer period than forty years and that the interest thereon shall be payable yearly, half yearly or quarterly, and provided further that the by-law authorizing the issue of such debenture or debentures shall first be laid before and approved by the Lieutenant-Governor-in-Council.

(2) Such debenture or debentures when so issued with the approval of the Lieutenant-Governor-in-Council may be secured by a mortgage to Trustees for the Debenture holders upon such of the real estate then held by the Trustees as may be then designated.

14. The Trustees by the name aforesaid shall have power to sue in any of the courts of this Province having competent jurisdiction for any cause of action touching the property and rights of the Trustees and for any moneys due or payable to them or their predecessors for the purchase money or rents of any lands or buildings or on any account whatever and to distrain for such rents when the same are in arrear and unpaid and to distrain for interest due upon any mortgage which may be held by the trustees and to act in all matters touching the collection and control of the funds of the Trustees and the

management and disposition of any property and lands belonging to the Trustees.

And the Trustees shall have power to invest in such securities as they may deem advisable, all moneys which may at any time come into their hands for the use and support of the Hospital which may not be required for the immediate expenditure of the Hospital, or may deposit the same in any chartered bank or financial institution of good standing, and generally and subject to the provisions of this Act the government, conduct, management and control of the hospital and the property, revenues, business and affairs thereof shall be vested in the Trustees.

NEW HOSPITAL BUILDINGS.

15. Without thereby limiting the general powers hereinbefore conferred it is declared that the Trustees shall have power to erect, equip and maintain all buildings that may be required for the purposes of the Hospital upon such site or sites as to them or a majority of them shall appear best; and in the event of the Trustees abandoning the present hospital site and building a new Hospital it shall be the duty of the Trustees in erecting new hospital buildings upon another site to erect upon a portion of such site a building suitable in every respect for the purposes of a lying-in hospital and to establish, maintain and support the same in connection with the hospital as part and parcel thereof upon the terms and conditions set forth in the resolutions of the Burnside Lying-in Hospital and the Hospital, authorizing the merger of the Burnside Lying-in Hospital in the Hospital and such building shall be called and known by the name and designation of the "Burnside Lying-in Hospital"; provided that a section or wing of the hospital building shall be deemed to be a building within the terms of this section.

And a portion of the said new Hospital shall be set aside and shall be designated and known as "The Andrew Mercer Eye and Ear Infirmary."

EXECUTION OF DOCUMENTS.

16. All grants, conveyances, assignments, mortgages, statutory and other discharges of mortgage, leases, contracts, distress warrants and other documents requiring to be executed under seal, shall be sealed with the corporate seal of the Trustees and shall be signed by the Chairman or some person thereto authorized by resolution of the Trustees and countersigned by the Secretary, or some person thereto authorized by resolution of

the Trustees, and all cheques, promissory notes and drafts shall be signed by the Chairman or some person thereto authorized by the Trustees and countersigned by the Secretary, or some person thereto authorized by resolution of the Trustees.

BY-LAWS.

17. The Trustees shall have the power of appointment and removal of the Secretary and the Treasurer, the Medical and other Superintendents and their assistants and clerks and of all other officers and servants of the hospital employed in or about any of its premises and may from time to time enact such by-laws and regulations for the general management of the Hospital and the trust and for fixing all salaries and wages, and for regulating the composition of the hospital staffs, their numbers, terms of office, privileges and duties; provided, always that such by-laws or regulations shall be laid before the Lieutenant-Governor-in-Council within 30 days after the same shall have been so enacted as aforesaid, and shall come into force at the expiration of one month thereafter unless they shall have been disallowed by Order in Council within that time.

BENEFACTORS AND ANNUAL SUBSCRIBERS.

18. Every individual who shall up to the time of the passing of this Act have subscribed \$500 and upwards to the fund of the Hospital and every individual who shall after the passing of this Act subscribe \$1,000 and upwards shall be called a "Benefactor" of the hospital and it shall be the duty of the Trustees to erect a tablet in the principal entrance hall of the Hospital upon which shall be inscribed from time to time the names of the said Benefactors and the amounts severally subscribed by them, and such Benefactors shall also be Visitors of the Hospital.

19. Every individual who shall have subscribed \$100 or more to the fund of the Hospital in the year immediately preceding an election of subscribers' trustees at which he desires to vote shall be an "Annual Subscriber."

MEDICAL STUDENTS.

20. The Trustees shall allow any medical student of the University of Toronto to visit the wards of the Hospital and attend them for the purpose of receiving instructions from the members of the Faculty of Medicine of the University of

Toronto, upon the payment of such fees and under such regulations and restrictions as the Trustees shall by any by-law or resolution from time to time appoint and the privileges fo this section shall extend to the medical students of the University of Toronto only and no other medical students shall have any right or authority to visit or attend the wards of the Hospital.

PAY PATIENTS.

21. The Trustees shall allow or permit all patients paying sufficient to cover all the cost to the Trustees of their maintenance and support while in the Hospital the right of employing their own surgeon or physician, subject to the regulations of the Trustees.

CITY PATIENTS.

22. The Trustees shall afford accommodation as far as possible to patients sent into the hospital on the order of the Corporation of the City of Toronto upon the payment to the Trustees of such rates as may from time to time be agreed upon, and subject to such regulations and restrictions as the Trustees may by by-law or resolution from time to time appoint.

THE HOSPITAL STAFF.

23. The composition, and number of the Hospital Staff, the terms of office, the duties and the privileges of the members thereof shall remain as at present until altered by by-law or resolution of the Trustees.

41 VIC., CAP. 71, SECS. 8, 9, AND 10 REPEALED.

24. Sections 8, 9 and 10, of an Act passed in the 41st year of the reign of Her late Majesty Queen Victoria, chaptered 71 are repealed.

STATEMENTS TO GOVERNMENT.

25. In addition to the returns required by section 10 of *The Charity Aid Act*, the Trustees from time to time when required so to do by the Lieutenant-Governor-in-Council shall render an account in detail of all moneys received by them as such Trustees specifying the sources from which the same shall have arisen or been received and the manner in which the same shall have been invested and expended and all such particulars as may be necessary to show the state of the fund and endowment of the Hospital.

ACT NOT TO CREATE NEW CORPORATION.

26. Nothing in this Act contained shall be construed as creating a new corporation but the corporation constituted by this Act shall be held to be the same with that constituted by the former Acts of the Hospital so that all actions or proceedings brought by or against the former Trustees and pending at the time of the passing of this Act shall be continued by and against the Trustees provided for by this Act and all matters and things done by the said former trustees shall be binding upon the Trustees hereby created until further or other provision may be made in respect thereof by the last mentioned trustees in conformity with this Act.

27. The hospital shall be the Provincial Hospital.

Wooden skewers are serviceable nail-cleaners. Rolling pins and kitchen towel racks are very convenient for adhesive plaster, rubber tissue, etc., especially for hospital dressings. Grocers' bags are the most serviceable receptacles for soiled dressings. Tar-paper is a smooth, fairly waterproof material to tack on the floor when preparing a room for operation.

Permanent contracture of the muscles, notably of the flexor group in the forearm, may develop within a very short time after the application of a splint that exercises undue compression. It is a wise rule to inspect all fracture dressings within twenty-four hours; and when this is not expedient special care should be exercised, when applying the dressing, to avoid compression.

Before performing curettage always make a final bimanual examination of the uterus in narcosis. The finding may determine some other form of treatment. Again, after curettage, before allowing the patient to get out of bed, carefully examine the pelvis for signs of a possible exudate.

When operating upon the ureter for calculus or stricture, avoid undue manipulation; it is important to prevent detachment of the ureter from its bed, if possible.—*American Journal of Surgery*.

Clinical Department.

A Case of Foreign Body in a Bronchus. THOMAS A. CLAYTON, M.D., Professor of Therapeutics and of Clinical Medicine in the George Washington University, Physician to the Garfield and to the University Hospitals, Washington, D.C., in *Jour. A. M. A.*

On March 19th, 1905, I was called to a neighboring town to see T. G., a boy, aged 5 years and 7 months, who, for the past twelve days, had suffered with a bad cough and an irregular fever, ranging from 99 in the morning to 104 in the evening. He seemed cheerful and free from pain, but there was a frequent cough, consisting of two or three expiratory efforts. The temperature was 105; the pulse 120, and the respirations, 60 a minute.

Examination.—The expansion was markedly diminished on the right side of the chest. The voice was too weak to allow of the detection of any differences in tactile fremitus, but there was certainly no increase over any area. Percussion showed a slightly higher pitch over the entire right lung, but only one small area of dullness extending from the angle of the scapula down to the liver. This area was oval and about 6 cm. wide at the broadest part. Over it the breath sounds were very faint and there was no increase in fremitus (an atelectatic area?). The respiratory murmur over the entire right chest was very faint and in marked contrast to the puerile breathing on the left. A sonorous rale could be heard in various localities over the right chest, but there were no fine rales anywhere. The leucocyte count was 42,000.

History.—The condition was at first quite puzzling, but it seemed clear when the following history was obtained:

On March 7th, twelve days previously, the child, while eating peanuts, laughed and at once had a violent choking spell. The paroxysm continued until, while jumping up and down to shake off his overcoat, he said he felt something slip down and was at once relieved. He seemed much exhausted and slept for an hour. A physician was called, but found nothing abnormal. Immediately after his departure, however, a loud, wheezing noise developed in the chest which was noticed by the child himself and by those about him. That night the boy slept well and the next day he was as bright as usual, but toward evening

he seemed sick and his temperature was found to be 101. From that time he had fever of a hectic type.

The second paroxysmal coughing attack occurred one week after the accident, it lasted about twenty minutes, was very violent and was accompanied by the free expectoration of mucus. The next day there was another paroxysm not lasting quite so long.

Course of the Disease.—The history, physical signs and symptoms all pointed to a foreign body in the right main bronchus.

On March 21st, the child was brought to Washington. He stood the trip fairly well, but was much exhausted and seemed very sick all day.

Dr. Charles W. Richardson saw him with me and confirmed my findings as to the physical signs and also concurred in the opinion that there was a foreign body in one of the bronchial tubes of the right lung.

The question of an immediate tracheotomy was seriously considered, but abandoned in favor of bronchoscopy, and an instrument was telegraphed for.

March 24th: The small area of dullness was unchanged, a loud, cooing rale could be heard on expiration all over the right chest. The respiratory murmur was much weaker on the right, especially anteriorly, and in the axillary region. Behind, the breath sounds were more nearly alike on the two sides. There was no tubular breathing anywhere.

March 25th: The boy had the fourth coughing paroxysm since the accident. It lasted several minutes and was accompanied by hemoptysis. He was thoroughly exhausted afterward and at once went to sleep. Numerous large rales appeared which could be heard all the evening.

March 26th: At noon the child had a violent coughing paroxysm lasting twenty minutes. Blood was expectorated and he complained of pain over the upper chest. Exhaustion was marked. When seen three hours later, the breathing was rather stridulous and air seemed to enter both lungs about equally. The object had evidently shifted its position. He was pale and his condition was such that I called Dr. Richardson, but before his arrival, at four o'clock, the physical signs had again changed to those so often before noted. The foreign body had dropped to its original position.

March 27th: Rales were heard at the bases of both lungs posteriorly. Air entered the upper right lobe freely, while the breath sounds were scarcely audible over the two lower lobes.

Over the fifth rib in the parasternal line there was a tubular sound to the breathing.

The bronchoscope having at last arrived, Dr. Richardson tried, under chloroform, to introduce the smallest tube (7 mm.) through the larynx. This proved to be impossible and the child's condition at that time did not justify a tracheotomy.

March 28th: We were greatly encouraged by the condition. Air seemed to enter the right lung freely, and the dull area had apparently decreased somewhat. The foreign body had evidently shifted its position, and we hoped it might have been dislodged and coughed up.

March 31st: The temperature, which had been nearly normal for six days, began to rise. Numerous rales appeared over both lungs.

April 3rd: Temperature was hectic. There was still an area of impaired resonance below the right scapula. Cooing rales were heard on both sides posteriorly. There was a tendency to sweat at night.

April 4th: The temperature was 103; pulse, 120; respiration, 32. Dr. J. D. Thomas found only a suspicion of tubular breathing over the lower right axillary line.

April 10th: The temperature had been ranging between 98 and 104. The cough was troublesome. There were large, cooing rales all over both lungs, but less air seemed to be entering the lower right lobe.

As there was no longer anything by which we could definitely locate the foreign body, we did not feel justified in attempting further operative interference. There seemed nothing to do but to wait and to hope for spontaneous expulsion. Some observations which I concluded shortly after this time also made me hope for ultimate recovery. I found that the ordinary entire cooked peanut kernel, when totally submerged for twenty-six days, crumbled on pressure in much the same way that a piece of bread would when thoroughly wet. The same was true, though to a lesser degree, of pieces of the kernel which were kept wet, but at the same time exposed to the air, while an unbroken half-kernel, under the latter conditions, was still quite firm at the end of the period.

April 15th: There had been an improvement. The temperature, though still hectic, was not so high, and the boy had been able to go out to drive. The motion of walking, however, made his cough more troublesome.

Examination on this date showed less expansion on the right

side and less air entering the upper and middle lobes until after coughing, when the sounds became more normal.

April 18th: The following note was made: "There is no difference in the amount of air entering the two lungs. If the foreign body is still present it does not, to any extent, obstruct any important bronchus. A cooing rale can be heard on either side on deep breathing. There is no dullness. The cough is less frequent and he seems quite like himself."

April 21st: Because I did not think that the X-ray would show a nut, I did not consider it wise to give him the extra exposure of a trip to a laboratory until this time.

X-Ray Examination.—The examination was made by Dr. Charles F. Stokes. The fluoroscope showed a distinct shadow just to the right of the sternum, which in a radiograph was found to be opposite the fourth and fifth ribs anteriorly. This shadow, I am convinced, indicated a small area of infiltration set up by the presence of the foreign body. The boy gradually improved, the temperature became normal May 20th and has since remained so, the cough disappeared, and at a subsequent fluoroscopic examination by Dr. Stokes, one month later, no shadow was seen. The peanut had disintegrated and had been coughed up, most likely in small pieces, and the inflammatory products had been absorbed.

Remarks.—The fact that the *corpus delicti* never actually came to light naturally raises the question as to the accuracy of the diagnosis. It is well known, however, that children seldom expectorate, and this child in particular never did, except on the several occasions noted above, when mucus and blood were propelled from his mouth by the violence of the expulsive efforts rather than of his own volition. Therefore, the peanut may have been coughed up and swallowed.

The facts that his illness dated from the time that he choked while eating peanuts, and that the symptoms and physical signs were absolutely characteristic of a foreign body in a bronchus, I think, fully justify the diagnosis.

If the cause of pain in the feet is not otherwise clear, examine them in the dependent position. This may develop the presence of erythromelalgia.—*American Journal of Surgery.*

Proceedings of Societies.

THE BRITISH MEDICAL ASSOCIATION.

1. *Fares, Going Dates and Limits.*—(a) Domestic Business, Certificate Plan Arrangements; free return regardless of number in attendance. Passengers going rail, returning R. & O. Navigation Co., or *vice versa*, rate to be one and one-half fare.

(b) European Business.—On presentation of certificate, to be prepared and signed by the Secretary of the Eastern Canadian Passenger Association, and countersigned by the Secretary of the Canadian Committee, or the Secretary of the British Medical Association, one-way tickets to be issued at one-half lowest one-way first-class rail fare; round trip tickets at lowest one-way first-class rail fare between all points in Canada. Rates to the Pacific Coast subject to concurrence of Transcontinental Passenger Association. Steamship lines to advise Secretary what, if any, additional arbitraries are required. Dates of sale, July 1st to September 30th, 1906, inclusive. Final return date, September 30th, 1906.

2. *Extension of Time Limit.*—On deposit with joint agent of Standard Convention certificates issued from points in the Maritime Provinces, points west of Port Arthur and from points in the United States, on or before August 28th, 1906, and on payment of fee of \$1.00 at time of deposit, an extension of time until September 30th to be granted. Joint agency to be conducted in the name of G. H. Webster, Secretary, Eastern Canadian Passenger Association, will be kept open from August 21st to September 15th, 1906.

3. *Side Trips.*—(a) Side trip tickets to be sold from Toronto to delegates from the Maritime Provinces, from points west of Port Arthur and from the United States, on presentation of validated certificate, or deposit receipt, at lowest one-way first-class fare for the round trip, to all points in Canada. Dates of sale, August 23rd to September 1st, 1906, inclusive. Return limit, September 30th, 1906.

(b) Side trip tickets also to be sold to delegates from Ontario and Quebec to stations west of and including Sudbury, and east of and including Montreal, on presentation of validated certificate or deposit receipt, at lowest one-way first-class fare for the round trip. It being understood, also, that the arrangements authorized for the exclusion of time limit from

points in the Maritime Provinces, from points west of Port Arthur and from points in the United States will also apply for delegates from Ontario and Quebec.

Usual additional arbitraries *via* Upper Lake Steamships to apply, viz., going lake returning same, \$8.50 additional to be collected. Going lake, returning rail, or going rail returning lake, \$4.25 additional to be collected. Also usual arbitraries *via* St.-Lawrence route, for delegates desiring to return by steamer, on presentation of tickets to purser, viz., \$6.50 Toronto to Montreal; \$3.50 Kingston to Montreal.

Via Northern Navigation Company on lines where meals and berth are not included, the rail rate will apply; on lines where meals and berth are included, rate to be single fare plus meal and berth arbitrary.

Ocean Transportation.—The "Lines" will grant the minimum rates named in the circulars published by the respective lines.

PROMINENT ENGLISH MEMBERS WHO WILL ATTEND MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Allbutt, Prof. Clifford, F.R.S., St. Radegund's, Cambridge, Regius Professor of Medicine, Cambridge.

Armour, Donald, Esq., F.R.C.S., 89 Hatley St. W. Son of Judge Armour.

Ashby, Dr. Henry, 13 St. John St., Manchester. An authority on diseases of children.

Barbour, Dr. A. H. F., 4 Charlotte Sq., Edinburgh. Son-in-law of the late Hon. Geo. Brown. An authority on obstetrics.

Barlow, Sir Thomas, Bart., K.C.V.O., M.D., 10 Wimpole St. W. The King's physician.

Barnes, Dr. Henry, LL.D., 6 Portland Place, Carlisle. Ex-President, and an authority in obstetrics.

Barr, Sir James, M.D., 72 Rodney St., Liverpool. President of section in medicine.

Bradford, Prof. J. Rose, M.D., F.R.S., 8 Manchester Sq., W. An authority in medicine.

Broadbent, Sir William, Bart., K.C.V.O., M.D., 84 Brock St. W. An eminent authority on the heart.

Browne, Dr. Langley, Moore House, West Bromwich. President of Council of British Medical Association.

- Buzzard, Dr. E. Farquhar, National Hospital, Queen Sq., W.C.
An authority on nervous diseases.
- Cameron, Sir Hector Clare, M.D., 200 Bath St., Glasgow.
One of Scotland's famous surgeons.
- Gibson, Dr. G. A., 3 Drumsheugh Gardens, Edinburgh. A
representative of the Royal College of Physicians, Edinburgh.
- Griffith, Dr. W. S. A., 96 Harley St. W. An authority on
obstetrics.
- Halliburton, Prof. W. Dobinson, M.D., F.R.S., 17 Marylebone
Road, N.W. One of the world's most able physiologists.
- Horsley, Sir Victor, F.R.S., 25 Cavendish Sq. W. Whose
name is famous in brain surgery.
- Lawford, Dr. J. B., 99 Harley St. W. A noted oculist.
- MacAlister, Dr. Donald, D.C.L., Barrmore, Lady Margaret
Road, Cambridge. The eminent Cambridge professor.
- Manby, Sir Alan Reeve, M.V.O., M.D., East Rudham, Norfolk.
Already well known to some Toronto people.
- Mickle, Dr. W. J., Grove Hall Asylum, Bow E. A Toronto boy
who has become an authority as an anatomist.
- Osler, Prof. W., M.D., F.R.S., 7 Norham Gardens, Oxford.
Too well known here to need description.
- Roaf, Dr. Herbert E., Bio-Chemical Dept., The University,
Liverpool. One of Toronto's sons doing good work in
Liverpool.
- Robinson, Prof. Arthur, M.D., The University, Liverpool. A
well-known anatomist.
- Sherrington, Prof. C. S., M.D., F.R.S., Physiological Laboratory,
The University, Liverpool. Already well known in
Toronto.
- Woodhead, Prof. G. Sims, M.D., F.R.C.S.E., 6 Scroops Terrace,
Cambridge. An eminent pathologist.

DISTINGUISHED FOREIGNERS WHO WILL BE PRESENT.

- M. le Docteur Delezenne, Directeur du Laboratoire de Physiologie de l'Institut Pasteur, 25 Rue Dutot, 15e Arrondissement, Paris.
- M. le Docteur L. Lapique, 6 Rue Dante, 5e Arrondissement, Paris.
- M. le Docteur M. Nicloux, 107 Rue Mouge, Paris.
- Professor Justus Gaule, University of Zurich.
- Professor Max v. Frey, University of Wurzburg.

Physician's Library.

Handbook of Surgery. By GEORGE BURNSIDE BUCHANAN, B.A. (Cantab.), M.B., C.M., F.F.P.S. (Glasgow). Published by John Currie, Edinburgh. Price 9s, net.

A very useful work for students, and one from which juniors more especially can get a general grasp of the subject.

The Examination of the Function of the Intestines by means of the Test-Diet. Its Application in Medical Practice and its Diagnostic and Therapeutic Value. By PROF. DR. ADOLF SCHMIDT, Physician-in-chief of the City Hospital Friedrichstadt in Dresden. Authorized translation from the latest German edition by CHARLES D. AARON, M.D., Professor of Diseases of the Stomach and Intestines in the Detroit Post-Graduate School of Medicine; Clinical Professor of Gastro-enterology in the Detroit College of Medicine; Consulting Gastro-enterologist to Harper Hospital, etc. With a frontispiece plate in colors. Crown octavo, 91 pages, extra cloth. Price, \$1.00, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

To those who are engaged in the soul-ravishing delights of examining human feces for clinical purposes the above work will prove of interest. Personally we would prefer to *read* about the clinical significance of these experiments rather than enter into actual details. The book is practical and well set out.

A Text-Book on the Practice of Gynecology. For Practitioners and Students. By W. EASTERLY ASHTON, M.D., LL.D., Fellow of the American Gynecologic Society; Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Second Edition, Revised. Octavo of 1079 pages, with 1046 original line drawings. Philadelphia and London: W. B. Saunders Company. Canadian Agents, J. A. Carveth & Co., Limited, 434 Yonge St., Toronto, Ont. 1906. Cloth, \$6.50 net; Half Morocco, \$7.50 net.

The fact that two editions of Dr. Ashton's new work have been required in the short period of six months indicates beyond a doubt that the medical profession was quick to appreciate the practical merits of the book; indicates that the general practitioner wants a treatise on gynecology that does not assume him to be an expert gynecologist, but rather describes in detail, not only what should be done in every case and emergency, but also precisely *how to do it*. Owing to the short time that has elapsed since the appearance of the first edition, and also from the thorough manner in which Dr. Ashton handled his subject

originally, the changes in this edition are necessarily few in number and limited chiefly to the correction of a few typographic errors and the alteration of several of the illustrations. In reviewing this new edition we cannot refrain from again speaking of the very practical illustrations. There are 1046 of them, all original line drawings, made especially under Dr. Ashton's personal supervision, from actual apparatus, living models, dissections on the cadaver, and from the operative technics of other authors. All superfluous anatomic surroundings are eliminated and the operations and procedures are detailed step by step with a clearness and accuracy we have never before seen. Certainly the success the work has won is well deserved and fully to have been expected.

The International Medical Annual, 1906. Publishers, E. B. Treat & Company, New York. Price, \$3.00.

The twenty-fourth issue of the *Medical Annual*, although its publication has been attended by exceptional difficulties, is a thoroughly satisfying work. Those who are familiar with this work will not need any words of praise from the reviewer; while those who have not yet subscribed for it may feel assured they will get the very cream of medical thought when they scan this volume. There is so much of solid value in this issue that it seems unnecessary to single out any articles in particular; rather we would advise the busy medical man to GET it and review it for himself.

The Operating Room and the Patient. By RUSSELL S. FOWLER, M.D., Surgeon to the German Hospital, Brooklyn, N.Y. Octavo of 172 pages, fully illustrated. Philadelphia and London: W. B. Saunders Co. Canadian Agents, J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1906. Cloth, \$2.00 net.

In Dr. Russell Fowler's admirable work we have a book that has long been needed, one that to our knowledge is unique in that it is the only work on the market devoted entirely to operative technic, with the pre-operative procedures of sterilization and preparation. Written by a surgeon of rich clinical experience for the use of surgeons, nurses assisting in an operation, and hospital internes, it clearly describes the preparation of material of all kinds, indicates the instruments required for the various operations, details the preparation and care of the patient before and after operation, and the methods of anesthetization, describes and illustrates the position of the patient for different operations, and contains all other information a knowledge of which is necessary to produce the highest efficiency. Indeed, it is a most excellent and most valuable work for practical use, and the operating surgeon will find it of additional value as it furnishes him a guide to which he may readily add his own variations of technic.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure blackmailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only \$2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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Dominion Medical Monthly

And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVI.

TORONTO, JUNE, 1906.

No. 6.

COMMENT FROM MONTH TO MONTH.

It was a decidedly graceful act for the Trinity medical class of "naughty" six, the last freshman class to enter Trinity Medical College before that one-time famous institution became amalgamated with the medical department of the University of Toronto, a class which had not even had one single lecture from Dean Geikie, to present their former Dean with a beautiful ebony cane, gold mounted and inscribed: "Semi-Centenary, W. B. Geikie, Dean, Trinity, '06." Dr. Geikie was a force in medical teaching in Ontario before many of us were born; and the many graduates of whilom days have heard with pleasure and pride of the kindly, thoughtful act of the last class of Trinity. Scattered throughout this and many foreign lands those self same graduates could have wished for nothing better than for the opportunity to participate in this spontaneous testimonial to one who filled such a large place in their medical student days at Trinity.

Our readers and members of the Canadian Medical Association and members of the Ontario Medical Association are reminded that although there is to be no scientific part this year to either annual meeting, that the meetings of both will be, however, important. On that account, therefore, more time will

be given to the ordinary business, and this, especially in the Canadian Association, is of immeasurable moment owing to the fact that a new Constitution and By-Laws will be presented as a report of the Special Committee on Re-Organization appointed at Halifax last year. The meetings of the Canadian Medical will be on the afternoon of the 20th and forenoon of the 21st of August; the Ontario Medical on the evening of the 20th. We urge a large, full, and representative attendance at both.

The conferring of honorary degrees comes around year after year like the spring fever. It is an utter impossibility now-a-days for convocation to pass without a half dozen or more being brought forward for this distinctive honor; and in many instances it would appear though the honor were conferred not for eminence or distinction in scholarly attainments, but rather for success in politics or in business, or for the reason that the honor so conferred may bring grist to the university mill. To an ordinary mind it seems a piece of foolishness to grant degrees to mediocre men, who cannot lay any claim to greatness in either medicine, law, literature or science; and the wholesale bestowal of LL.D., a degree which ought to be reserved only for those who have attained eminence in learning, cannot be too strongly condemned. The graduates of an institution which values its honorary powers so lightly must look with an unkind eye upon the direction these self-same degrees sometimes go. Can it be that there is no one modest enough, or honest enough in the knowledge of his scholarly attainments, who ever thinks of refusing these degrees handed out by unwise heads which constitute the corporation of these institutions.

We published in our May issue a copy of the bill on patent medicines which was before the recent meeting of the Ontario Legislature. There is a distinction between patent and proprietary, but the distinction is of less and less moment year after year. Formerly proprietary articles were looked upon with favor by the medical profession, and could, consequently, be styled ethical. The so-called patents never were. Doctors used these proprietary or ethical preparations in some cases on the strength of the representations made by their manufacturers probably mostly so in all cases. Some used them to greater extent than others; and amongst them all were found many use-

ful and valuable combinations. The doctors trusted the manufacturers of these preparations and took their representations as truthful, and proceeded to verify them, were satisfied, and continued to use them. They used them without in many cases knowing their exact ingredients or the exact proportion of their ingredients, just as they used Griffith's Mixture, Easton's Syrup, Dover's Powder, etc. These preparations were made expressly for the dispensation of the profession, and were in no way advertised to or brought before the people at large. An attempt now is being made in the United States—it is not attracting much attention amongst the Canadian profession so far—to divide these proprietary remedies into two classes, ethical and unethical. All those which do not have their formulæ submitted to certain parties are to be unethical; those which do, ethical. Surely this is a strange way and a strange method of procedure. Unquestionably, if it has been wrong on the part of the medical profession to do in the latter days of the nineteenth century and in the beginning of the twentieth, what its forefathers did in the middle, or prior to that; for there is no practical difference, then even in Canada there are countless sinners. To be a sinner suggests conversion: then let him who is without sin among ye cast the first stone. We remain so far unconvinced that it has been wrong to use these preparations; for we have seen many times prescriptions which when compounded would floor their master to tell what form the combination took when it had entered the stomach of his patient and what its therapeutic effect would be. The whole subject will probably end in a compromise. Although probably the doctor does not remember at the time he prescribes Dover's powder, the exact quantity of opium his patient is going to get, he has the means of finding out; and where there is a drug of pronounced therapeutic action, as strychnine, opium, etc., in a combination, he should at least know that and its quantity per dose. Acetanilide is a drug which has come in for a good deal of attention during the present campaign on account of the fact that it is said to enter into the combination of several preparations of this character. Now, the coal tar products have undoubtedly proven a great boon to the physician's armamentarium, but they have been so shamefully abused that it is little wonder that many serious if not fatal accidents have occurred. This is because of the fact that nearly all the text-books (we are speaking now in particular of acetanilide) have set down the dose of this drug at too high a figure. We have used it fre-

quently, and have found that in two-grain doses, repeated when advisable, it acts as well as ten grains, which, we believe, is the ordinary dose prescribed over the drug counter for headaches. In most instances the accidents which have occurred from the use of this drug, or any of the combinations supposed to contain it, will bear investigation and publication in the medical press—but not in the lay press. We submit that the doses of all the coal-tar preparations are generally set down at a too high figure, and the young physician, and those using these for the first time, should feel his way carefully with small doses, when he will find that very often they will prove satisfactory, and that he will not be required to resort to the larger ones. There is one principle of which we are sure, and that is, a drug advertised to the medical profession should not be advertised to the patient.

We have written so often in the past about patent medicines that our views on that question ought to be understood. There can be no question that the self-prescribing of remedies is a dangerous practice; but we are not going to suppose for one moment that everybody will be driven to a doctor by legislation, when he is a trifle indisposed. In fact, strange to say, doctors do not look for any such millennium. It is the duty of the doctor to warn the public against the evil habit of drug taking, for nefarious habits in this respect are soon and easily formed. Their consequences once formed are often disastrous. Such preparations on the market as contain alcohol beyond a required percentage, cocaine, opium, strychnine, etc., should have their sale restricted and governed in some manner, and the quality of the dangerous drug and the quantity of it should certainly be upon the label of the bottle. Although it is an unwritten therapeutic law, or rather principle, that it is best for the patient not to know what medicines he is taking, we believe in these particulars, in the interests of the public, the law might be modified in the direction indicated. We do not know that it will serve any good purpose having all the ingredients and their respective quantities printed for him who runs to read.

Science Notes.

ACCORDING to Dr. Marcus H. Thomas, who points out the importance to the railroads of first aid to the injured, both from a humane and economic standpoint, in the January 6th issue of the *Journal of the American Medical Association*, the railway accident, in spite of modern inventions and appliances, is not only apparently inevitable, but on the increase. Among the 1,300,000 persons engaged in operating the railroads in the United States, statistics show that one in each 500 was killed during 1904, and one in every 24 was injured. Taking up the consideration of the subject from the standpoint of sordid advantage, "the one which should be of paramount importance to the railroad, with whom the economic question is always one of vital interest," the author says: "The steam railroads of the United States pay annually in damages to injured persons 0.74 per cent. of their gross earnings. This is seemingly a trifling decimal, but in coin and currency it amounts approximately to \$14,000,000. In addition to this sum, \$1,000,000 is spent annually in the maintenance of a legal department, one-half of which expense may safely be attributed to the defense and settlement of personal injury damage suits. These figures do not cover the total expense of injuries by common carriers by any means. This compilation pertains solely to the steam railroads, while the interurban electric lines and local street railway lines increase the above totals many fold. Particularly do the local street railways add enormously to the list. It is estimated that the Metropolitan Elevated of New York alone pays annually \$2,000,000 for personal injuries, and has constantly on hand nearly six thousand suits of this nature. The Brooklyn Rapid Transit Company's annual personal injury budget is in the neighborhood of \$1,000,000. The ease with which evidence can be purchased, and the ubiquity of the professional damage suit lawyer in the large centers of population, gives the simulator and impostor a larger percentage of successful chances than with the transcontinental railroad." Dr. Thomas contends that the surgeon who is qualified in the negligence law is in a position to render the most effective and economic service as adjuster of personal injury claims. "There exists to-day," says he, "in most of otherwise well-organized railroads a lack of co-ordination between the legal and surgical staffs, as a result of the

one failing to grasp the importance of the technic of the other. This proposition operates with equal force conversely. It is into this breach that the medico-legal claim adjuster can step to the assistance of both departments and with economy to the company." In fact, Dr. Pearce Bailey, who is quoted as an authority on forensic medicine, expresses the belief that "the very best adjuster that a railroad can have is a medical man with knowledge of negligence law." In conclusion, the author submits the following recommendations to the railroad companies: "a. The instruction of trainmen and shopmen in first aid to the injured. b. The incorporation in this instruction of practical points on accident law. c. The employment in the claim department of a medical man, skilled in theory and practice of surgery and adept in negligence law, whose duty it will be to assist and advise counsel of the road, to bring about co-operation between the legal and surgical staffs of the closest possible nature, and last, but not least, to be possessed of a fund of sound sense and a personality that will enable him to deal direct with the claimant."—*Scientific American*.

THIS is another name for the prevention of mosquito breeding by obliterating the primary conditions requisite for their wholesale production. On the 11th instant the Third Annual Convention of the American Mosquito Extermination Society was held in this city, at the New York Aquarium, and supplemented in the evening by a dinner at the Union League Club by the President, Mr. Wm. J. Matheson, in honor of several guests and Health Board officials. At the convention it was shown that much progress had been made toward the abatement of the mosquito nuisance by a greater enlightenment of public sentiment in its favor, as evidenced through recent legislative enactments. In the State of New Jersey, for example, where only a few years ago the suggestion of eliminating the mosquito met with ridicule, now, as a result of a more universal education and extension of information on the subject, it is reported that the State Legislature has passed almost unanimously an appropriation of \$350,000, to be expended at the rate of \$50,000 per year for the diking and ditching of the great salt marshes lying adjacent to the city of Newark and about the Hackensack River. Legislation is also in process in the New York Legislature to the same end for the benefit of New York City. The convention adopted what is termed a "Mosquito Brief," stating in simple language the number of species of mosquitoes that inhabit marsh lands

and cesspools of the United States— that they can only breed in water; that one mosquito can lay on the average three hundred eggs a day; that the life of one mosquito is about a month. The most dangerous of Southern mosquitoes is the *Stegomyia fasciata*, the natural carrier of yellow fever germs. At the evening dinner, Gen. Fred. D. Grant, of Governor's Island, U. S. army post, gave some interesting reminiscences on mosquitoes and their effect on the health of the army. He related how he had protected a division of the army located on one side of the Rio Grande River, in a southern section of the country, from the spread of yellow fever, which had broken out in a town situated on the opposite bank. He secured funds from Washington to carry out an effective system of screening, and said as a result that not one of his men was taken with the fever. On Governor's Island, numerous relics in the shape of 15-inch-gun shells were inverted, so as to shed water instead of holding it, which had the effect of relieving locally the generation of the insects. Even upright rifle barrels were filled with sand to avoid the collection of water. Mr. Paul D. Cravath related an interesting record concerning the relation of the mosquito to malaria. On the north side of Long Island, about thirty miles from New York, there were certain valleys and bays where the mosquito was notoriously evident. The areas were located upon a map. Another record was made as to the extent of malaria over this section, from physicians and others, and these areas were placed upon a second duplicate map. This medical map was then superimposed over the first map, and it was found the areas in both cases pretty evenly matched each other. This record is of special interest to all boards of health, and proves most graphically how it is possible to improve the public health by the prevention of mosquito breeding. Other interesting remarks were made, showing how marshy places by being reclaimed and converted into public parks could easily improve land valuations and at the same time become a public benefit.—*Scientific American*.

A LITTLE more than a year ago there died in Jena, that world-famous town, Prof. Ernst Abbe, who has had no small share in making Jena so well known to the entire civilized world. At the time of his death, papers and magazines contained full accounts of the life and work of this truly remarkable man, reciting in detail his numerous contributions to science and his successful experiment in organizing an industrial enterprise upon

distinctively new lines. Since that time the feeling that here was a man whose work has been for the good of mankind and whose memory should be fittingly honored, gathered strength until there was appointed a committee to take charge of soliciting funds for the purpose of erecting in his native town, between the Volkshaus erected by him and the Zeiss works, a statue as a memorial. The names of a number of American scientists and business men who had had dealings with the Zeiss works were included in the committee named. We in America seem very far off from the little German town where the statue to Abbe is to be placed; and one might think it of little account whether we help to erect the statue or not. But this is a unique occasion, as Abbe was a unique man, and most of us who know anything at all about him will consider it a privilege to be able to contribute, be it ever so small a sum, to the statue that is to perpetuate his form to posterity. Contributions may be sent to this office or to the Bausch & Lomb Optical Company, Rochester, N. Y., the American agents of the Zeiss works.—*Scientific American*.

News Items.

DR. RENNIE, of Chatham, has bought Dr. Brereton's practice at Chesley.

DR. L. C. KARN, formerly of Woodstock, died recently in Ortonville, Minn.

DR. MITCHELL, of Toronto, has commenced the practice of his profession at Wroxeter.

DR. F. J. OLD, of Port Colborne, has been appointed associate coroner for the County of Welland.

DR. P. J. McCUE, son of Mr. Jas. McCue, of Melancthon, is now practicing medicine at Crediton, Ont.

Two new associate coroners appointed are Dr. F. J. Thorpe, of Port Colborne, Welland County, and Dr. G. B. Smith, Toronto.

DR. G. E. HOLMES has left Clinton for Saskatoon, Sask., where he will probably practice his profession.

DR. MORRISON, of Paisley, has accepted the position of head physician for the hospital of the Canada Copper Co. at Copper Cliff.

DR. GORDON has decided to go south for his health. He is disposing of his property and handing over his practice in Ripley.

DR. J. C. LINDSAY, who carried on a medical practice in Blyth for six years, has sold out to Dr. J. E. Charlsworth, of Morpeth. Dr. Lindsay purposes going to the West.

DR. A. J. ROLLINS, ex-warden and the well-known M.D. of Exeter, is selling out his property in the village and purposes removing to some point in the North-west to resume his practice there.

DR. J. L. TURNBULL, who sold his practice in Goderich a short time ago with the intention of going to a western city, has changed his mind and decided to remain in Ontario, and has located in Listowel.

DR. MCNAUGHTON, who for the past fourteen years has practiced in Glenallan, has disposed of his practice to Dr. J. D. MacKinnon, of Wheatley, Ont. The latter gentleman is a nephew of Dr. Angus MacKinnon, of Guelph.

DR. UNSWORTH, at a meeting of the Hamilton Health Association, was appointed resident physician of the Hamilton Sanitarium. He will go to Gravenhurst for a week or two to get pointers, and will take charge of the local institution on his return. No patients will be received till then.

DR. REUBEN CURRY, one of the oldest practitioners in this district, is dead, from acute heart trouble. Nearly forty years ago he carried on a successful practice in Rockwood, moving to Toronto, where he continued practice until four years ago, when he came to Guelph to live. A widow and a grown-up family survive. Police Magistrate Curry, of Picton, is a brother of the deceased.

DR. J. H. ELLIOTT, physician-in-charge of the Muskoka Cottage Sanatorium, Gravenhurst, has been invited to visit Wisconsin to consult with the trustees of the new State Sanatorium for Consumptives about to be erected there

DR. HAROLD CASCADEN, who has been taking post-graduate work in London, Edinburgh, Glasgow and Dublin Colleges of Medicine, has returned home. He will remain there for a few weeks, after which time it is his intention to remove to Western Canada.

POST-GRADUATE STUDENTS.—Of the twenty-one post-graduate students now studying in London, these are from Toronto: Dr. S. H. Westman, Dr. F. H. Scott, Dr. J. A. McCallum, Dr. E. D. Carder, Dr. Percy W. Saunders, Dr. R. D. Sproat, Dr. A. W. Fisher, Dr. John Malloch, Dr. William Hackney.

DR. A. E. STEWART, son of Simeon Stewart, formerly of Leamington, a graduate of the High School, has purchased a practice at McGregor, Essex County. Another son, George, is taking a course at the Toronto General Hospital, preparatory to graduation from the Medical School.

DR. H. B. HUTTON, of Port Colborne, son of Rev. B. L. Hutton, a former pastor of Victoria Street Church, Goderich, was married on the 18th of April to Miss Alberta Sanford, of Toronto. The wedding took place at the home of the bride's parents, Tottenham, the ceremony being performed by the groom's father.

At the meeting of the Toronto Pathological Society, held on Saturday, April 28th, the night of meeting for next year was changed to the last Wednesday in each month. The following officers were elected for the coming year: President, Dr. J. A. Amyot; Vice-President, Dr. W. H. Pepler; Treasurer, Dr. C. J. Wagner; Corresponding Secretary, Dr. E. S. Ryerson; Recording-Secretary, Dr. H. G. Hutchison.

DR. J. D. MONTEITH, of Stratford, has decided to withdraw from medical practice for a year or two. He will take a complete rest during the coming summer, spending a portion of the time in and about Stratford, and the remainder in a visit to Manitoba and the new Provinces. In the fall, or early in January

next, he will leave for Europe and the British Isles, where several months will be spent in further equipping himself in his profession, especially in the surgical branches. Dr. Monteith began his practice just ten years ago in Stratford, opening in the offices in the Gordon Block, now occupied by the present firm of Monteith & Smith. Dr. Smith will now assume full control of the practice in the same offices, which have been refitted and thoroughly equipped.

THE following officers were elected at the last meeting of the Toronto Clinical Society, Wednesday, May 2nd: President, Dr. H. B. Anderson; Vice-president, Dr. H. A. Bruce; Recording Secretary, Dr. George Elliott; Corresponding Secretary, Dr. W. J. McCollum; Treasurer, Dr. Geoffrey Boyd.

MEMBERS of the Ontario Medical Association are again reminded of the annual meeting to be held Monday evening, August 20th, in Toronto. As heretofore announced, it will this year be simply an executive session. The following are chairmen of committees for the current year: Dr. C. J. C. O. Hastings, Toronto, Committee on Credentials; Dr. R. J. Trimble, Queenston, Committee on Public Health; Dr. A. H. Perfect, Toronto Junction, Committee on Legislation; Dr. John Ferguson, Toronto, Committee on Publication; Dr. W. R. Walters, East Toronto, Committee on By-Laws; Dr. Bruce L. Riordan, Toronto, Committee on Ethics; Dr. D. J. Gibb Wishart, Toronto, Committee on Papers and Business; Dr. H. J. Hamilton, Toronto, Committee on Arrangements.

HAVE WON POSITION.—The five Toronto men who have begun brilliant careers in the medical world of London are: Dr. Donald Armour, assistant surgeon, West London Hospital; Dr. George W. Ross, pathologist and registrar at Victoria Park Hospital; Dr. George Badgerow, house surgeon at Golden Square Hospital; Dr. C. H. Thomas, house surgeon, Great Northern Central Hospital, Holloway; Dr. Colin Campbell, house surgeon at Moorefields. Here are the other eleven holding positions in London hospitals, two being at Birmingham: Dr. C. K. Russell, Montreal, house surgeon at the National Epileptic Hospital; Dr. George H. MacLaren, of Hamilton, senior resident medical officer at Birmingham Ophthalmic Hospital; Dr. Simpson, also of Hamilton, at Moorefields; Dr. Hamilton Wright, pathologist at West London Hospital; Dr. Charles

Stuart, senior resident surgeon at Golden Square Hospital; Dr. Ambrose Stanton, senior house surgeon at London School of Tropical Medicine; Dr. E. G. Weir, at Greenwich Seaman's Hospital; Dr. W. Jones, senior house surgeon at St. Peter's; Dr. W. H. Lowry, house surgeon at Birmingham Ophthalmic Hospital; Dr. Allen, at Hackney Hospital.

Correspondence.

BRITISH MEDICAL ASSOCIATION.

To the Editor of DOMINION MEDICAL MONTHLY:

Dear Sir,—Dr. Wm. Osler has suggested that a Clinical Museum, at which rare and interesting cases can be exhibited, should form one of the features at the meeting of the British Medical Association. The Secretaries will be glad to hear of any cases that members would care to exhibit, and would be glad if members would communicate with them about such cases.

Yours faithfully,

R. D. Rudolf, M.D., M.R.C.P.,
396 Bloor St. W., Toronto.

J. T. Fotheringham, B.A., M.D.,
20 Wellesley St., Toronto.

R. Hutchison, M.D.,
22 Queen Anne St., London. W.

Hon. Secretaries.

Publishers' Department.

M. J. BREITENBACH & Co., 53 Warren St., New York, the proprietors of that excellent ethical preparation, Gude's Pepto-Mangan, will send free to any physician requesting same a handsome bacteriological chart, which will prove a valuable decoration to any physician's office.

SANMETTO IN PREGNANCY.—For years I have been a warm admirer of Sanmetto in all cases of pregnancy. I find that it carries away from the system pretty well all of the albumen and strengthens the abdominal muscles. Try it, some of you brethren, and report it. I prescribe it in the last month of pregnancy.—Joseph J. Parker, M.D., Warfield, Texas.

It is very gratifying to me to testify of the merits of Resinol Soap. In conjunction I am also giving testimony of more than a dozen of my friends who have used it through my personal recommendation. For soothing and making the skin smooth after having shaving it has no parallel, to say nothing of that indescribable feeling experienced in its effects after a bath.—J. A. Wright, D.D.S., 2902 State Street, Chicago, Ill.

MAKING SUFFERERS COMFORTABLE.—As has been frequently stated, the special province of the physician is to relieve pain. To do so without producing a drug habit, or in some way jeopardizing the patient's life, has always been a problem. I looked askance upon any drug or preparation purporting to be free from objectionable qualities until I began prescribing antikamnia & codeine tablets a year or so ago. The Antikamnia Chemical Company in their preparation of these tablets, by a refining process known to themselves, remove all the toxic elements from these two drugs, so that no damaging effects result. They produce only the most benign results, and there is no tendency whatever to produce a drug habit. I now regard antikamnia & codeine tablets as the ideal pain-reliever. Headache and neuralgia are not their only field of usefulness. I find that in chronic

and malignant diseases, where pain is a marked factor, the anti-kamnia & codeine tablets relieve pain and make the sufferer more comfortable. Cancer is a condition attended by excruciating pain, but I was agreeably surprised and my patient gratified at the results obtained from these tablets. I have also had pleasing results from these tablets in both acute and chronic rheumatism. All physicians know how intractable is sciatic rheumatism, but the last few cases I had, I prescribed these tablets, and I am sure they lessened the duration of the disease. To relieve pain in its incipency will often abort an inflammatory disease. This preparation certainly has quite a large field of usefulness, and the doctor who once uses it will seldom resort to any other anodyne.—W. T. Marrs, M.D., College of Physicians and Surgeons, St. Louis, Mo., Jewett, Ills., May 5th, 1906.

THE SCHOOL-ROOM AS A FACTOR IN DISEASES OF YOUNG GIRLS.—There is no disguising the fact that our system of imparting knowledge by imposing excessive intellectual labor and stimulating competitive zeal in the school-room is very largely responsible for most of the nervous disorders of the young women of to-day. That sustained mental exertion is a menace to the health of girls at the age of puberty, there can be no denying. Yet that is precisely the system in vogue at our institutions of learning at the present time. While it is true that modern architecture has greatly improved the hygienic condition of the study-rooms, it is highly probable that the present rush and hurry methods of instruction are even more injurious to the physical state of our young women than was the faulty system of ventilation, until recently endured. The worry and excitement attendant upon present-day school life is, undoubtedly, the prime cause of a governing percentage of the neurotic disturbances which are so prevalent among the women of America. In fact, it is quite within the bounds of truth to assert that many of the diseases which present themselves to the gynecologist have for their origin a nervous system rendered bankrupt by strife in our temples of education. Mental overstrain, when enforced day after day, soon renders the nerve structure incapable of absorbing adequate nourishment from the blood stream. Ultimately, nervous vitality is almost completely exhausted and depression, gloom, languor and mental impotence ensue. As the taxation is extended, the condition

DOMINION
MEDICAL MONTHLY

AND ONTARIO MEDICAL JOURNAL

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VOLUME XXVII.

TORONTO:

GEORGE ELLIOTT, PUBLISHER

203 BEVERLEY STREET

1906

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Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVII.

TORONTO, JULY, 1906.

No. 1.

Original Articles.

THE WEIR MITCHELL TREATMENT OF ANEMIA.*

BY J. N. GUNN, M.D., CLINTON, ONT.

Perhaps some of you will remember two years ago, when I presented here five cases of pernicious anemia, which we then had under observation. It may be of interest here to mention that of that number three are now dead, and that the other two have had recurrences.

This brief sketch is a part of the sequel to one case of pernicious anemia, which is a primary anemia—to-day I propose taking up the secondary anemias. I will not enter into etiology, blood changes, symptoms, with treatment, but confine myself to results which we have obtained in the hospital and practice in a number of cases of secondary anemia due to various causes. I will first recount the results in a few cases, and then briefly outline the routine treatment, which is practically the Weir Mitchell, with slight transformation in individual cases.

Mrs. T.—For several months had been nursing a sick friend. Came in complaining of nervous exhaustion and palpitation of heart, anemia, tired all the time; pains in different parts of her body; appetite poor; does not sleep well. On examination a well-marked systolic murmur over the base. On entering the hospital on February 26th, hemoglobin 38 per cent.; March 12th, 56 per cent.; March 27th, 70 per cent.; April 23rd, 87 per cent.; May 20th, 95 per cent. Total increase, 57 per cent. Murmur dropped.

*Read at regular meeting of Huron Medical Association.

Mr. T.—Had pneumonia in winter; did not regain his normal condition; felt poorly; was anemic, irritable and discouraged. April 23rd, B.T. 50 per cent.; May 2nd, 65 per cent.; May 8th, 80 per cent.; May 15th, 86 per cent.; May 22nd, 92 per cent.; May 29th, 96 per cent. Total rise in five weeks of hemoglobin, 46 per cent. Weight from 119 to 130 pounds.

Mrs. E.—Aged 65 years. A thin, anemic, nervous, sleepless individual, always tired in the morning on rising; had severe pains in different parts of the body; had tried several changes of climate for health. Her symptoms were so severe at first one would suspect some severe organic disorder; but examination revealed none, except a reduction in the body weight, and in the hemoglobin. She was under treatment for six weeks, and in that time all her symptoms had entirely disappeared. The hemoglobin increased from 70 to 100 per cent., and she exceeded her usual weight.

Miss K.—A very marked case of exophthalmic goitre. The heart was very rapid and irritable, 140 to 150, and marked exophthalmos and tremor; very much emaciated and anemic. When the patient left the hospital the symptoms of the disease had entirely disappeared, except some prominence of the eye. The hemoglobin increased from 65 to 100 per cent.; weight from 75 to 125—50 pounds.

Other cases I might mention are anemia following parturition, 27 to 90 per cent.; bleeding piles, from 35 to 100 per cent.; another at present under treatment, brought on by long nervous strain, with marked hysterical symptoms and anemic condition, gradually improving.

The Weir Mitchell methods can be applied to a great variety of cases, and there are some that cannot be cured by any other form of treatment.

In this class may be placed those exasperating cases which come complaining of nervous exhaustion. She has aches and pains and tender points; eats and sleeps poorly, and awakes unrefreshed; has various uterine and ovarian troubles, and is always tired, and takes little interest in anything. She ultimately becomes, as Holmes describes it, the vampire, who sucks the blood from healthy people about her.

Other favorable cases are:

1. Certain forms of mental disturbance, such as melancholia.
2. Cases where convalescence is slow from fevers, pneumonia, etc.
3. In early stages of tuberculosis.
4. In exophthalmic goitre cures may be effected.

5. In various forms of uterine and ovarian disorders.
6. It is also very beneficial in cases of chronic dyspepsia who are kept thin and anemic by the disease.
7. In early stages of Bright's and in floating kidney of recent date.
8. In heart disease, with failing compensation, especially if combined with Schott resistive movements and baths.

Weir Mitchell describes the treatment as a certain method of renewing the vitality of feeble people by a combination of entire rest and excessive feeding, made possible by passive exercise obtained through the steady use of massage and electricity.

The first step in the treatment is isolation. Isolation is necessary, and the patient should be removed to a hospital or sanitarium, away from familiar scenes. Home treatment does not succeed well. If circumstances compel the patient to remain at home, her room should be changed. Weir Mitchell states that if you once separate the patient from the moral and physical surroundings which have become part of her life of sickness, you will have made a change which will be in itself beneficial, and will enormously aid in the treatment that is to follow. This isolation is not as imperative where the symptoms are brought on by distinct causes, such as blood losses, dyspepsia, etc. The room should be bright, airy and comfortable, while the nurse should, if possible, be an entire stranger. Patient is put to bed and kept there from three to six weeks, as may be necessary, and during a part of this time allowed to see no one, except the nurse and the doctor. To take the place of ordinary exercise, two measures are employed—massage and electricity. By the kneading and rubbing of the muscles and skin, the liquids in the tissues are absorbed and poured into the lymph spaces, and a healthy flush is brought to the skin. This passive exercise should last from one-half to one hour, and may be used either in the morning or afternoon. If the massage is used in the morning, the electricity should be used in the afternoon.

Every part of the body should be gone over, even the face and scalp. In the afternoon each muscle should be passively exercised by electricity, each muscle being made to contract by the application of the poles of the battery to its motor point.

Both of these forms of exercise do not call for any expenditure of nerve force, and they keep up the general nutrition.

To outline a day's programme: At 7.30 a.m., a glass of milk, either hot or cold; 8 a.m., sponge with tepid water, following with rough towel friction; 8.30 a.m., breakfast, either boiled,

poached or scrambled eggs, milk, toast, fish, etc., tender meat or chicken. At 10 a.m., massage; at 11, milk in egg-nog; at 12, reading for one hour; 1 p.m., dinner, small piece of steak, rare roast; beef soups; easily digested vegetables; 3 p.m., electricity; 4.30 p.m., glass of milk or egg-nog; 6.30, supper time, no tea or coffee, but toast, and butter, milk custard, eggs or junket; 9.30 p.m., glass of milk or egg-nog. The amount of milk and the number of eggs should be slightly increased.

With a programme like the foregoing, the day is well filled, and the time does not drag as heavily as one might expect. In order to get good results, certain rules should be laid down, and each individual case is not lost sight of for a single hour.

TWO CASES OF ECTOPIC PREGNANCY: OPERATION, RECOVERY.*

BY J. P. KENNEDY, M.D., WINGHAM.

Mr. President and Gentlemen,—Ectopic pregnancy, I believe, does not occur very frequently in the practice of the general practitioner. During the last twelve years in Wingham it has been my fortune, or ill-fortune, to meet with at least four cases which I recognized as such. The first case, which I reported at this association some years ago, died two days after operation. The second case, which I met some four or five years ago, was in collapse when I was called, and died before I could get preparations made for operation. A subsequent post-mortem, however, demonstrated that her death was due to internal hemorrhage, following the rupture of a tubal gestation. I might add that this patient was a bleeder, the family giving the history of serious, in fact they claim almost fatal, hemorrhage in her case from the extraction of a tooth some years previously.

The first case which I wish to report to-day occurred in the practice of Dr. D. M. Gordon, of Lucknow. On June 26th last Dr. Gordon telephoned me to go to Lucknow the following day to operate on a case of hematocele. I went over early the next morning, and found patient with the following history, as furnished me by Dr. Gordon:

*Read at regular meeting of Huron Medical Association.

R. F., aged 26; primipara, first seen by Dr. Gordon, May 24th; examination then revealed slight uterine enlargement and discharge, no pains, nausea, browned skin, tympany, and abdominal tenderness over whole area, which eased off and on for two weeks, with temperature running from normal to $100\frac{1}{2}^{\circ}$, remaining normal for a few days, then followed by a severe attack of vomiting. On June 11th, 12th and 13th patient felt much relieved. On June 14th a sudden collapse occurred, when patient became pulseless for three or four hours, apparent death impending, followed by swelling in Douglas' cul-de-sac, and dulness over lower and left side of abdomen. Patient began to rally, and twelve hours afterwards temperature was 96° , pulse 180. Temperature raised to normal second day, following with varying temperature for 100° to $101\frac{1}{2}^{\circ}$ for next eight days; pulse, 100 to 140 for four days, dropping to 110 to 124; next three days, temperature became erratic, running from 101° to $102\frac{1}{2}^{\circ}$; suspicious of septic condition.

Upon examination, I found patient with a temperature of 102° ; pulse, 120. A large mass, which was clearly to be seen in the left inguinal region, with tenderness over the whole of the lower abdomen, particularly on the right side.

After the usual preliminary preparations, assisted by Drs. Gordon and Spence, of Lucknow, I opened the abdomen in the middle line, when the first thing to attract our attention was an enlarged, elongated gangrenous appendix adherent across the lower bowel, about six or seven inches in length, the tip reaching over to the bladder and uterus on the right side. The appendix was so rotten that it broke twice before I succeeded in freeing it from adhesions and removing it. I then packed right side of abdomen around end of the stump of appendix with some dry gauze pads, and proceeded to examination of the mass on the left side. This I found adherent to the intestines surrounding it, and also to the peritoneum of the abdominal wall. With some difficulty, by aid of the fingers and gauze pads I was able to separate these adhesions and free the mass down to the broad ligament. This I then transfixed with a pedicle needle, and tied with a Staffordshire knot. The mass, which I here present to you, was then cut away, and contained, as you will see, a well-developed fetus of probably two and one-half months. Below the mass, in the pelvis, was a large quantity of old blood clots, which I scooped out with my hand, sufficient to fill a small granite wash-basin. I then washed out the abdomen with gallons of plain sterile water, removed gauze pads from around

the stump of appendix, and dried out cavity thoroughly. On account of condition of appendix, I thought it wise to drain. I therefore packed plain sterile gauze about the end of the stump, and also in the pelvis down behind the uterus. This packing was brought out through the lower end of the wound, and the balance of the abdominal wound was closed with interrupted, through-and-through, silkworm gut ligatures. As may be imagined, this patient had a very stormy convalescence, and her eventual recovery is no doubt largely due to Dr. Gordon's careful after treatment. Dr. Gordon reports that her temperature moderated for a few days, $100\frac{1}{2}^{\circ}$ to $101\ 2-5^{\circ}$; pulse running 110. July 3rd, 4th and 5th, temperature became more erratic, from $101\ 7-8^{\circ}$ to $102\ 3-5^{\circ}$; pulse, 112 to 118. On the morning of July 6th, temperature was 101° ; pulse, 110. In the evening it suddenly jumped to $105\ 2-5^{\circ}$; pulse, 145. Active purgation baths, etc., brought temperature down to 103° on the morning of the 7th. On the evening of the 7th, temperature was $103\ 2-5^{\circ}$; pulse, 130; bowels were moved eight or nine times during the afternoon. That evening, about ten or twelve ounces of pus were passed per rectum. The next two days there were bloody stools, ceasing on the third day. This was followed by a rapid convalescence. By the middle of August, patient was able to move around; gained rapidly in weight, showing ever since in appearance and feeling unequalled robustness. The opening in the abdomen was packed eight times during the after treatment to ensure drainage to appendix stump.

The second case I have to report occurred also in Dr. Gordon's practice, and the doctor, I think, deserves great credit for his early diagnosis in the case. On October 9th last Dr. Gordon telephoned me to go to Lucknow and operate for what he had diagnosed extra uterine pregnancy. Dr. Gordon gave me the following history of case:

Mrs. McK., aged 28; had on September 12th symptoms of miscarriage. On September 13th, placenta not having been discharged, examination of uterus failed to find it; had pains; suspicion of tubal pregnancy. Examination showed enlargement of uterus, and revealed a small tumor on the right side; tender to the touch, with slight uterine discharge. On October 7th, the pains were quite severe, and upon examination increased enlargement. Advised immediate operation. On October 8th, assisted by Drs. Gordon and Spence, of Lucknow, I opened abdomen, and found a mass on the right side, which was easily separated from adhesions. When loosened down to

the broad ligament. I clamped it with forceps and removed it. No fetus was found, but specimen shows an extruded mole from within layers of broad ligament. I removed about two tablespoonfuls of clotted blood, showing that tube had ruptured into the broad ligament. The anterior and posterior layers of broad ligament were united by a continuous catgut ligature. The abdomen was mopped out with dry sterilized pads. The peritoneum was united by a continuous catgut ligature; the aponeurosis and muscles united by catgut, and the skin closed by a continuous horse-hair suture.

Patient had an uneventful convalescence. Temperature, $99\frac{1}{2}^{\circ}$ on the second day. Stitches removed on tenth day. Union by first intention.

Both cases are interesting from the fact that they were both primiparae. I might add, too, that the second case I mentioned as dying from hemorrhage was also a primipara. The first case reported to-day is particularly interesting to me, on account of the gangrenous appendix, and also from the fact of the fetus being found.

THE CLINICAL SIGNIFICANCE OF TRACHEAL BREATHING.*

BY A. F. MCKENZIE, M.D., MONKTON, ONT.

Mr. President and Members of the Huron Medical Association,—During normal respiration there is no noticeable movement of the larynx. By the term tracheal breathing, as used in this paper, is meant that form in which the respirations are accompanied by up-and-down movements of the larynx, and with it, of course, the trachea. My attention was first called to this subject by a short paper, which appeared in some medical journal a good many years ago, soon after I commenced to practice. I am sorry to say that at present I am not able to give the name of the author of the article nor the journal in which it appeared. So far as my memory serves me, I think the subject of the paper was "Signs of Approaching Death," and, after enumerating the ordinary signs by which we are usually guided in forming an estimate as to the probable outcome of any serious case of acute illness, the author spoke of tracheal breathing as

*Read at regular meeting of Huron Medical Association.

being an almost certain indication of a fatal termination. I am not quite sure whether the term tracheal was applied by the writer to this form of breathing; but in the meantime, until something more appropriate is suggested, it appears to be a convenient term to use, particularly as the term "tracheal tugging" has been applied to somewhat similar movements of the windpipe, accompanying, however, the cardiac pulsations instead of the respirations.

As you are no doubt aware, tracheal tugging is one of the diagnostic points of aneurism of the arch of the aorta, and depends upon the fact that in passing from the trachea to the lung the left bronchus lies just below the arch of the aorta, and consequently each time the aorta is distended, the aneurism (if on the under side of the arch) pushes the bronchus downwards before it, and the latter drags in turn upon the trachea, causing it to descend with each beat of the heart. To obtain this sign it is generally necessary to put the trachea on the stretch. The respiratory movements of the larynx and trachea, to which I wish to call your attention to-day, are easily perceived both by touch and sight. The range of movement varies from about a quarter of an inch up to half or possibly three-quarters of an inch. The slighter degrees of movement are, perhaps, more easily detected by touch than by sight.

In the literature at my command I am able to find very little on the subject of movements of the larynx during respiration. In "Clinical Methods," by Hutchison and Raney, p. 35, it is said that "movements of the laryngeal box are sometimes conspicuous, and may call for explanation," but nothing further is stated as to the conditions in which we may expect to find these movements.

Jakob, in his "Atlas of Internal Medicine and Clinical Diagnosis," p. 37, says: "In cases of dyspnea depending upon stenosis of the larynx this organ makes wide respiratory excursions, and the head is thrown backwards, while in cases of stenosis below the larynx this organ remains still, and the head is bent forwards."

My limited opportunities for observation have led me to form the following provisional conclusions regarding this sign:

1. While a person is in a normal condition there are no up-and-down movements of the larynx during respiration.

2. Tracheal breathing does not occur in ordinary cases of illness, nor in those diseases in which there is a certain amount of dyspnea, but where we ordinarily look for recovery—such as

asthma, pneumonia, spasmodic croup and mild attacks due to cardiac and renal disease. The onset of tracheal breathing in these troubles makes the prognosis of the case much more serious.

3. Tracheal breathing does occur in diseases of the larynx attended by obstruction.

4. It is liable to occur during the course of any illness, and when it does, particularly if the movements are well marked, generally indicates a fatal termination.

5. The amount of danger appears to be in direct relation with the extent of the movements, the larger the movement the greater the danger.

6. When the sign occurs in connection with diseases of the lungs, such as pneumonia, bronchitis, pleurisy, etc., it is probably not of such grave significance as when occurring in cases where the respiratory tract is sound or only secondarily involved. The few cases I have seen recover, and the cases where death has been delayed for long periods, have mostly been in connection with respiratory troubles.

7. This sign may indicate a serious state of affairs when other symptoms by which we are ordinarily guided, such as the state of the pulse, condition of consciousness, etc., do not appear alarming.

8. Although occasionally other symptoms may point to a speedy fatal termination before the onset of tracheal breathing, yet, so far as my observation goes, death is always preceded for a longer or shorter period by this sign, the period ranging, as a rule, from a few hours to three or four days, occasionally to a few weeks, and in one case, to which I shall refer later, to a year or more.

In illustration of this subject, short sketches of the following cases may be of some interest:

1. A lady about forty-five years of age had for years been subject to bad attacks of asthma. I was called to see her in what was supposed to be one of her ordinary spells. Besides the usual dyspnea, she complained of pain in the right side of the chest, due, no doubt, to pleurisy. I saw her again in about thirty-six hours. Her pulse was about 120, and weak. Her intellect was perfectly clear. There was considerable dyspnea, and she complained greatly of the pain in the side. To relieve this I gave a hypodermic injection of one-eighth of a grain of morphia. I told her husband that her heart was weak, and that she might not get better, but did not think there was any immediate danger. Shortly after I left she passed into a comatose state, and died in

a few hours. By the friends her death was attributed largely to the hypodermic injection I had given, and I received considerable discredit. In thinking about her case afterwards, and wondering how I had let her slip out of my hands, I recollected noticing that she had marked tracheal breathing, but did not at the time attribute any particular importance to it. This death occurred about six years ago, and was, I think, the first to impress upon my mind the importance of this sign.

2. A man about seventy years of age, suffering from heart disease, had been under my observation for a couple of years, during which time he had several severe attacks of dyspnea, cyanosis, dropsy and other symptoms due to lack of compensation. An enlarged prostate, necessitating the use of the catheter, which set up cystitis, complicated the case. While I was absent from home on a vacation he became very bad. The physician who was looking after my practice thought he was so bad that he said he could not recover, and that it was no use going to see him any more. When I reached home the friends sent for me, and I felt very much like agreeing with the other doctor. He was in a partial comatose state, pulse very slow, breathing of the Cheyne-Stokes type. However, as I had seen him recover from some very bad attacks before, and as the larynx did not move up and down during respiration, I ventured to hold out some hopes. He recovered from this attack, and was able to go about some. In about three months he had another attack. In a few days tracheal breathing developed, and after this he died in about thirty-six hours.

3. A man about forty-two years of age, who had been troubled with dyspeptic symptoms for years, was suddenly seized with severe pain in the right hypochondrium, and vomiting. I was not able to make a positive diagnosis, but thought it was probably a case of peritonitis, due to perforation of a duodenal ulcer. Although it was recognized by me as a serious case, and consultation was requested, the man himself did not think he was very bad. His mind was perfectly clear, and he refused to believe he would die until an hour or two before his death. Well-marked tracheal breathing was noticed three days before the fatal termination.

4. A man about fifty-seven years of age, who had previously always been healthy, had been suffering from cough and what he thought was the grippe for more than a week. On a Thursday he was taken with a chill, and I saw him on the following Monday. This was his first day in bed. He had considerable

consolidation of the back of the right lung, respirations about 40; pulse 120, weak and irregular. Expectoration, which had been rusty colored, was of a green gage color. Tracheal breathing was well marked. I gave an unfavorable prognosis, and he died on the following Friday.

5. A lady about sixty-eight years of age had been suffering from pernicious anemia for about two years. She gradually became weaker, and it was seen that it was only a matter of time until death would come. I was suddenly sent for one night, as she was thought to be dying. I found her comatose. Her jaw was dropped, and the respirations were very labored. The larynx did not move up and down during respiration. Next morning, however, tracheal breathing had developed, and she died in about twelve hours. In this case the sign was late in declaring itself, and was consequently not of much use in prognosis. Possibly the dropping of the jaw was one reason why the sign was so late to appear.

6. A lady about sixty-eight years of age had for years a bad cough, probably due to chronic tuberculosis. She was very much emaciated. I was called to attend her for a pain in the side. She was feverish, and appeared to be developing pneumonia. Tracheal breathing was well marked. I gave a very unfavorable prognosis. Next day she appeared considerably better. The fever had left her, and the pain in the side was better, but the larynx still moved up and down with each respiration. This type of breathing continued until her death, which did not occur until some months after. This is the only case that I have observed in which the patient was able to go around, or where the symptom was present so long before death. She probably had laryngeal tuberculosis, as she was quite hoarse. Another case of pulmonary tuberculosis had tracheal breathing for a couple of weeks, and possibly longer, before death occurred.

7. A short time ago I had occasion to resuscitate by artificial means a new-born infant. When it first began to breathe of itself there were distinct up-and-down movements of the trachea, but these gradually ceased as respiration became easier.

I have seen recovery occur in a few cases of illness where this sign was present, but in none of them was the movement of the larynx very great.

One case was that of a man sixty-eight years of age, who had rather a severe attack of bronchitis.

An old woman over ninety years of age complained of pain

in the back. This was probably rheumatic. There were slight up-and-down movements of the larynx. It is now some months since I saw her, and I understand she is still living. A friend of mine has told me of a case of severe pneumonia in a young man, where the movements of the larynx were well marked, and where recovery occurred. A case of empyema, occurring in my own practice, and which recovered after operation, had slight tracheal breathing for some days before the operation.

I must confess that I am not prepared at present to enter into a discussion of the physiology of respiration, nor to give an adequate explanation of this sign. In a well-marked case one would almost think the windpipe were dragged upon with each inspiration. This might be due to an irregular dilatation of the chest cavity of such a nature that the ordinary expansion of the lung would not fill the cavity so quickly as in health, and hence the lung as a whole, and consequently the windpipe along with it, would be drawn down. Possibly the contraction of the sterno-hyoid and sterno-thyroid muscles may have something to do with it. At any rate, it is probably due to an effort of nature to obtain more air with each respiration, and is an exaggeration of the same condition which causes the dilatation of the nostrils which we see in ordinary pneumonia.

The object of this paper has been to call your attention to what appears to me to be a valuable clinical sign, and one which, taken in conjunction with other signs and symptoms, may enable us to detect the approach of danger a little earlier than we might otherwise do.

The sign is one that is so easily detected by both sight and touch that it must have been noted by many observers from the time of Hippocrates to the present. My excuse for bringing the subject before the members of this association is that I can find so little concerning it in the literature at my command, and from conversation with a few medical men I have found that none of them had previously had their attention called to it.

**CASE REPORTS—(a) INTRALIGAMENTOUS CYST; (b) UTERUS
WITH MULTIPLE FIBROIDS; (c) OVARY WITH
BLOOD CLOT.***

BY W. GUNN, M.D., CLINTON, ONT.

Dr. W. Gunn, of Clinton, presented several pathological specimens: Four fibroids and three carcinomata of the uterus; three gangrenous appendices recently removed; a dermoid tumor of the ovary; five prostates, successfully removed; a fibro-adenomatous goitre, and the following specimens, which were considered sufficiently interesting to be reported in more detail:

(1) *Specimen*.—A large intraligamentous cyst. The uterus thinned and elongated to six or seven inches, with the muscular fibres of the broad ligament, are spread over and firmly adherent to the tumor in this location.

History.—Miss McC., age 58. From girlhood menstruation was painful and irregular. In the year 1873 had two attacks of what was called inflammation of the bowels. In 1887 she noticed a swelling on the left side, low down. The growth was slow at first, but more rapid latterly. The spread of the tumor at first was upwards on the left side, but later it extended to the right side. The left leg was swelled and painful. In March of 1896 she was operated on by Dr. Allaway, of Montreal, at the hospital. The diagnosis was an ovarian tumor of fifteen pounds. Recovery was slow, a left-leg phlebitis following the operation. In 1898 she felt the tumor returning on the left side, and it became very large. In 1902 the tumor emptied into the bladder quite suddenly. Filling again, it emptied into the bladder a year later. Six months later there were signs of intestinal obstruction—pain, vomiting and tympanitic distension. Her life was about despaired of, when the tumor broke into the bowel, large quantities of a coffee-ground fluid coming away, and diarrhea following for about a week. In March of 1905 the distension was very great, and the tumor was tapped, and nearly an ordinary pail of fluid taken away, and marked relief followed for a time. Six months later she came to Clinton for operation. The abdomen was the size of a full-term pregnancy, and the usual upward and downward pressure symptoms were present. Dr.

*Reported at regular meeting of Huron Medical Association.

Gurn, of Ailsa Craig, and Dr. Shaw, of Clinton, assisting, the abdomen was opened in the middle line. The sac was noticed behind the posterior peritoneum, the peritoneum having to be twice divided. The large and small intestines and omentum were intimately and extensively attached to the tumor above and in the front. The uterus was thinned and elongated and continuous with the muscular structure of the broad ligament, the latter being spread over and intimately attached to the inner aspect of the sac. To separate the intestines required considerable time and a good many ligatures. The part of the small intestine where the sac emptied was easily recognized, and required a few Lembert sutures. The sac was now emptied, and by the aid of gauze, blunt dissection and a few ligatures, the tumor was separated from the posterior aspect of the bladder, and the ureter for two-thirds of its length. The uterus was now amputated at the cervix, and, with the spread-out muscular fibres of the broad ligament, was removed attached to the sac. To have done this earlier in the operation would probably have rendered the separation to structures behind considerably easier. No opening was left in the bladder after separation, but the communication between the sac and bladder was evidently near the entrance of the ureter into the bladder. After the usual toilet, the peritoneum was as far as possible restored to its normal relations, and a twenty-four-hour drain put down to the base of the bladder behind the peritoneum. Recovery was rapid and without any drawback. The indications for attaching such cysts to the abdominal wall and draining were discussed.

(2) *Specimen*.—A uterus with multiple fibroids, one of which protruded from the cervix. Attached to it a pus tube and a large pus sac in the broad ligament, in which the appendix is embedded.

History.—Miss L., aged 34 years. Suffered from menorrhagia metrorrhagia and anemia for several years. For about six weeks previous to operation, which took place February last, there was a pronounced febrile condition, with the physical signs of an abscess forming on the right side of the uterus. Dr. McCrimmon, of Kincardine, whose patient she was, diagnosed a fibroid of the body of the uterus, a polypus and a pelvic abscess, either due to appendicitis or uterine sepsis. Drs. McCrimmon and McDonald assisting, the belly was opened in the middle line. The abdomen was thoroughly protected with gauze, the appendix separated, and stump inverted. The abscess was aspirated of about twelve ounces of pus, mopped out thoroughly,

packed and closed. The sac was separated with the fingers, gauze and slight dissection, with comparative ease. The uterus and tube was removed in the usual manner. Recovery was complete, but somewhat delayed owing to stitch abscesses.

The discussion following referred to the indications for attacking a pelvic abscess per vaginam.

(3) *Specimen*.—Showing ovary $3\frac{1}{2}$ inches long and $1\frac{3}{4}$ inches thick, containing $1\frac{1}{2}$ oz. of blood clot; the tube very much thickened and containing about $\frac{1}{2}$ oz. of blood clot. The broad ligament contained a cyst, with well-defined wall, with about 12 ozs. of a sero-santous fluid. The entire mass black and gangrenous. No signs of ectopic gestation. Dr. Campbell, of Zurich, who had charge of the case, gives the following history:

History.—Mrs. P., aged 38 years, mother of five children. Saw her for the first time May 6th, 1906. She complained of a severe, steady pain in the region of the outer border of the left kidney, shooting across the lower part of the abdomen. The pain was more severe at times. There was frequent micturition, a few drops being passed at a time, which burned her. There was an aching feeling in the back. Pulse 110, and weak; temperature, 98° ; face pale; expression anxious; cold, clammy sweat. In absence of a better diagnosis, he thought renal colic a fairly probable one; $\frac{3}{8}$ gr. morph. and 1-30 gr. strychn. gave rest and sleep for four hours. May 7th—Temperature, 98° ; pulse, 80. Though tender over same region, was able to resume duties in a few days. May 23rd—Driving to Zurich, felt a pain similar to the one already described. Arriving at a store, she lay down. The pain was very severe, sharp and lancinating. The face pale and bluish. Pulse could not be felt at wrist. Vomiting, anxious expression, cold sweat, no urinary symptoms. The symptoms improved under morph. and strychn., and she was sent home, a distance of five miles, on a mattress. May 24—Felt better; pain now referred to the lower abdomen. Temperature, 99° . An enema of soap and water relieved her of some gas. May 25—Severe pain and tenderness in the appendix region. Abdomen tympanitic and much distended above, not so much below. Temperature, $98\frac{1}{2}^{\circ}$; pulse, 135. Very weak, vomiting persistent, constipation complete, right rectus very tense. Complaints of bowels, or gas rolling to appendiceal region, and receding. A swelling the size of a large fist can be felt above Poupart's lig. and below McBurney's point, oval in shape, and dull, but quite tympanitic just below tumor. May 26th—Succeeded in persuading patient and friends that the case was entirely surgical in the

way of treatment. It should have been stated that menstruation was regular every four weeks till six weeks ago, since which time it was every twenty-one days.

Operation.—Assisted by Dr. Caw, of Parkhill, and Dr. Campbell, of Zurich, the abdomen was opened through the right rectus muscle over the most prominent part of the tumor, and a gangrenous mass presented. Examination showed it to be attached to the left side of the uterus, and that the mass was twisted and lying on the cecum. The urinary symptoms were no doubt due to pressure or tension on the bladder or ureter, and the obstruction was caused by pressure. It is hard to say whether the ovary or the cyst in the broad ligament was the primary cause of the torsion. By clamping and ligating near the uterus, the mass was easily removed without breaking. This is the fourth day since the operation, and Dr. Campbell reports the case improving rapidly.

MEDICAL THOUGHTS DURING LEISURE HOURS.

BY JAMES S. SPRAGUE, M.D., STIRLING, ONT.,

Author of "Medical Ethics," etc.

"Read not to criticize, but to accept, or reject, or to consider."

My last paper to this honored journal had for consideration many interests, but the one most prominent was that referring to the incorporation of nurses—certainly a will-o'-the-wisp infatuation, in fact a butterfly chase, yet in keeping with the temperaments of the promoters and their satellites of the Nurses' Incorporation Bill. Are we so inexperienced and so callous in our observations as to credit such statements as were made by Mr. Crawford, M.P.P., to or in effect that they were a body only second to, if they were second to, the medical profession, and followed the lines of the incorporation of the medical fraternity. If such statement be correct—which, probably, some innocent, without thinking, would endorse, and abundant proof would be thus advanced, that, "although man, a thinking being, was designed, few use the great prerogative of mind"—my opinion is that of every M.D. whose heart is in his profession's best interests, our profession would be made to regret such legal

incorporation, and the attendance of students in medicine at our universities would be lessened, not forgetting the fact that our services would be decreased. Such views need no illustrations or endorsements. If allowed graduation, incorporation and all the academic privileges, of which a degree is in keeping, the legislators will in duty be bound to listen to the appeals of Christian Scientists, faith healers, osteopaths, and all such visionaries, for whom our Governments have most humanely erected homes or refuges in the interests of the dear people—the erratics. Yes, visions are due to disease. I make this statement, if it is in direct contradiction to the saying of Marcotte: "*La nature ne fait rien de rien, et la nature ne se perd point.*" If this assertion, that "Faults in the life breed error in the brain, and these reciprocally those again," should be correct—and such, I believe, is correct—would it not be wise for the legislators to direct these sciolists to put their visions and ambitions in cold storage for a certain and reasonable season?—or better, to go in retirement for close self-study until their brains are freed or purged from delusions and vapors?

Hope, when not well established or placed on reasonable foundation for the anticipation of consummation, or influenced by the bubblings of the yeast of confident enthusiasm, according to well-established laws or rulings; frequently, yes, by its very nature, usually drifts into a relapsing condition, or an apathy decidedly incredulous, and too frequently, yes, ultimately, observable by those who think. Hope, not too well founded, as stated, flattens as a bursted bubble, when deduction, conservative in character—as hard as sea-biscuit—commences its work, and effectually triumphs. And those who, directly or indirectly, should consider these interests, should consider, too, that, although medicine is rapidly reaching higher levels, yet there are many barnacles that grow and fatten to its detriment. To further exemplify our present position, I will state it is necessary to refer to a sketch from a Berlin paper, wherein De Witte, of gigantic proportion, was represented. On his back was the Czar, who was tightly grasping the throat of the peace-maker—the real ruler, the real friend of the Russias. To him the words of De Witte are addressed: "Do not strangle me, for if you do we both will fall." Cannot we bring this simile to bear with force to illustrate how we stand, and with the nurse or her proposed organization on our back, and the unrelenting grip at our innocent throats? To use another simile, wherein the vanity of her ambition is fairly represented. The inane solicitude of the

present Kaiser to do work—meritorious as was that of his illustrious progenitor, Frederick the Great—occasions the remarks of the thrice illustrious one who, some few years since, was cartooned as sitting in a chair, while his relative, our noble Victoria, was placing a cake of ice on his head to keep it cool. The Kaiser remarks, while seeking his progenitor's virtues and bodily proportions: "I've taken every opportunity to hoist myself to your height, but I fear, if so elevated, I shall not be able to hold myself equal." A consideration of those interested is imperative. Christian Scientists and osteopathy, more recently, are struggling, no doubt, for incorporation, and as there are others equally delusive enough to prove the necessity of wider exposure of error which, if preachers would assist us (the doctors) would vanish. However, such is a vain hope when a member of Parliament says the business of the nurse is the equal of the profession of medicine. One fact is this, and if the study of our interests be considered, it will be proven, that "no gentler pirates ever scuttled ships" than those above named, and encouraged are they by the patent medicine concerns, whose products many so-called medical journals nurse, while they so easily recognize the members of our profession as very easy marks—and such they are, and such is attributable to the want of proper and national organization and co-operation.

LONDON, a most prosperous city, a railroad centre rivalling our metropolis, after suffering much injustice in regard to its patriotic and just claims as a centre for examinations for our Medical Council, has been successful, and on May 4th announced its first session. When one considers the position of London, the fine record of its university, and that Detroit and Buffalo have several medical colleges, to which many from this most flourishing district, of which London is the metropolis, have been encouraged, actually been compelled to go, we well can understand the well-conceived and nursed complaints of the medical men of London and its friends; in fact, all loyal men in medicine. One fact is this: the calendars of the medical colleges of Buffalo and Detroit, or Ann Arbor, will not contain among their matriculants and graduates the announcement that one-half the names are Canadians. Is not Dr. W. H. Moorehouse worthy of every praise? Are not those who sustained him, too, equally to be praised?

DR. MATTHEW WALLACE, a name made worthy of adoration, marks well the fact that one man can illustrate the worth, the

dignity and the glory of medicine, for Rev. Dr. Watson wrote me when "The Bonnie Brier Bush" was enjoying immense and well-extended distinction, that not from one, but from the many medical men's lives he drew the picture—to be treasured forever. Yet MacLure was a bachelor; but Wallace was the father of several children. If "he who does not provide for his family is worse than an infidel," how does the world balance this life? Another query is: Had Dr. Wallace claimed *another* alma mater, and was an adherent of *another* church, would his name or his noble works been ever known? *No!* is my answer. Thank God there are other ledgers. Although on earth that of Wallace was poorly kept and worth but little, that in Heaven has more than one page full of his sacrifices, his devotion to the sick; and kind Heaven will not see his wife or his children suffer. Cannot his alma mater give his sons free tuition, thus further to illustrate her faith in the teachings of Hippocrates named in the oath?

To be Continued.

Clinical Department.

Safety Pin Safely Passed by Child of Sixteen Months. BY J. A. POSTLEWAIT, M.D., Tarkio, Mo., in the *J.A.M.A.*

In *The Journal*, of Nov. 25, 1905, Dr. L. W. Littig reported a case of a child eleven months old who swallowed a safety pin one and one-eighth inches in length and passing it in a few hours less than five days. No inconvenience was suffered and no treatment was given. Some time since I had an experience much the same with a child sixteen months old. In my case the safety pin swallowed was one and one-fourth inches long, open, and three-fourths of an inch wide at the angle of opening. The safety pin was swallowed at noon on Saturday and on the following Thursday at 9 a. m. it was passed. The child did not suffer and no treatment was given.

Rupture of Thoracic Aneurysm into Pleural Cavity, Simulating Pleuritic Effusion. BY JOSEPH B. GREENE, M.D., of Fort Stanton, N. M., Passed Assistant Surgeon United States Public Health and Marine-Hospital Service, in the *Am. Med. Jour.*

The following case seems of sufficient interest to report, on account of its rarity and as showing the possibility of confusing blood in thorax with serious or purulent effusion:

Patient, J. D., colored, aged 41, nativity, Kentucky; admitted to the United States Marine Hospital Sanatorium at Fort Stanton, New Mexico, on January 2, 1905; transferred from Louisville, Ky. The records show the family history is good; that the patient had had syphilis several years ago, but that his general condition was good up to one year ago. Since that time he has several times required hospital treatment. He has had occasional hemorrhages from the lungs with slight rise of temperature. For several months after admission to this institution he continued to lose ground, and on July 10 began to complain of considerable pain in the left chest, with all the physical signs of effusion into the same side. His temperature varied from about 37 deg. C. in the mornings to 38.5 deg. C. in the afternoons. We at once used the aspirating needle at five different points at the base of the left lung, and were surprised at finding

nothing. The patient continued to suffer severely, both from pain and dyspnea, and on the evening of July 20 suddenly died.

The autopsy findings showed the entire left pleural cavity filled with dark, clotted blood, which explained our failure to aspirate the pleural cavity. Incision into the left lung showed at the apex a cavity the size of a small orange, completely filled with an aneurysmal sac, which had extended from the arch of the aorta. The aneurysmal sac contained layers of fibrinated blood. The pleural cavity was connected with the aneurysmal sac through a small opening the size of a pencil point. The remainder of the left lung was infiltrated with tubercles. The heart and right lung were apparently normal.

A Case of Bell's Palsy in an Infant of Eight Months. BY
JOHN H. W. RHEIN, M.D., Neurologist to the St. Agnes and
Howard Hospitals, etc., Philadelphia, in *Am. Ped.*

The patient, an infant of eight months, was brought to the Dispensary for Nervous Diseases, at the Howard Hospital, on October 3rd, 1905, by her mother, who stated that, a week previously, the right side of the child's face became paralyzed the day after a small abscess under the chin on the right side was evacuated by a surgeon.

The family history is entirely negative. Both parents are living and well, as are also two brothers and two sisters. The child was born at term, but was a cross birth, and it was necessary to turn the child and deliver her feet first. The labor was difficult and the child very feeble for nine days after birth, during which time she was unable to nurse at the breast. There was no paralysis noted at this time, and she gradually grew stronger, remaining in perfect health until September 23rd, when she developed an abscess under the chin on the right side, which was incised and evacuated on the third day by Dr. Frank Patterson.

The day after the abscess was opened the mother noticed that the child was unable to close the right eye, that the mouth was drawn to the left, and that the head was slightly tilted to the left. The child was brought to the clinic a week later, when a complete right-sided facial palsy was observed. The paralysis was not apparent when the face of the infant was at rest, but when she cried she did not close the right eye, nor move the right side of the face. There was, as far as could be learned, no involvement of the throat or palate muscles, which was con-

firmed by the fact that the child had no difficulty in nursing. There was no paralysis of the ocular muscles, and no apparent weakness of the arms or legs. The ears and throat were carefully examined, but nothing abnormal was found. The pupils reacted normally. The knee-jerks and the tendon-jerks of the arm were active and equal on both sides. The plantar reflex was normal, and there was no Babinski phenomenon present. No local wasting could be observed anywhere. The bowels were regular, and the digestion good. The child did not present any signs of rachitis. The fontanelles were apparently closing satisfactorily. An electrical examination of the muscles showed the presence of the reactions of degeneration. There was a slight increase in the galvanic irritability of the muscles of the right side, and the response to the faradic current was gone to bearable currents. The child presented nothing else abnormal in the history, or physical signs, except that occasionally she suffered from night-terrors.

In many respects this case is not unusual. There is nothing peculiar about the paralysis, or in the cause of the paralysis. The usual causes of unilateral facial paralysis in infants are those which operate in adults. In addition to these, however, we meet with cases of this character immediately following childbirth, when they are due to pressure of the forceps, or pressure exerted by the promontory of the sacrum, or by the ischiatic spines, or, finally, in rare instances, by intrapelvic tumors. Probably the most frequent cause of Bell's palsy in children is disease of the middle ear. It may be the accompaniment of diseases at the base of the brain, such as tumors, meningitis, or fracture of the base of the skull, and may follow surgical operations in the region of the ramus of the jaw. Finally, unilateral facial palsy may be caused by extension of inflammation to the nerve from neighboring inflammatory processes, as in the case exhibited.

It is unusual, however, to see a typical case of facial palsy develop at the early age of eight months. Bell's palsy is rare under ten years of age, and Gowers states that he has seen two cases in the second year of life. It probably occurs most frequently between the ages of twenty and fifty years. In Sachs's opinion (*Nervous Diseases of Children*, 1895, p. 229) the disease is rare under three years of age, although he himself saw one patient nine months of age who suffered from rheumatic facial palsy. Henoch (*Vorlesungen ueber Kinderkrankh.*, 1903, p. 231) reports a case in a child of two, with complete palsy of

the left facial nerve, due to pressure at the stylomastoid foramen by an abscess in the lymph nodes of the neck. He also described two cases in children of five and eleven months, respectively, the cause of which was a granular tumor under and behind the right ear, associated with diffuse swelling of the connective tissue. In a fourth case, a child of four months, there was left-sided facial palsy following gangrenous destruction of the nerve at the stylomastoid foramen, due to noma of the ear.

Grancher and Comby (*Traité des Maladies de l'Enfance*, 1905, p. 621) claim that age has no influence upon the development of facial palsy, making the statement that they had seen cases as young as eleven and thirteen months.

.. Notwithstanding the fact that it is well known that facial palsy develops in young infants, I think it may be concluded that it is comparatively uncommon. This is rather remarkable when we consider that middle ear disease, which is one of the most common causes of Bell's palsy in children, is of very frequent occurrence in young children.

The possibility occurred to me that the anatomic relations of the temporal bone may have something to do with this. It will be remembered that at birth that portion of the temporal bone called the pyramid is spongy and vascular, and that the canal through which the facial nerve passes is often not entirely covered in. Is it not possible that, by reason of these conditions, the nerve is less susceptible to pressure, resulting from caries and suppuration? On the other hand, it must not be forgotten that the anatomic relations may favor the extension of the inflammation to the nerve, because it is so much exposed.

The presence of facial palsy, with abscess of the middle ear, is of considerable prognostic importance. It is claimed by Goodhart and Henoch that this combination of symptoms is almost pathognomonic of tuberculosis, and that the prognosis is always bad.

In the treatment of facial palsy in children it is important, in the first place, not to frighten the patient by a too hasty application of the electric current. Sometimes it is wisest, at the first two or three treatments, to apply the electrodes without any current at all. The preferable method of applying the galvanic current (which is the current to be employed) is to place an indifferent cathode electrode at the nape of the neck, or between the shoulders, and a small interrupting anode electrode in the anterior cervical region, and then to turn on the current until the milliamperemeter registers 2 or 3 milliamperes. The anode

electrode is then brought slowly up over the distribution of the facial nerve, and the skin slowly stroked for three to five minutes. Care must be observed to avoid as much as possible the bony points, in order to reduce to a minimum the amount of pain. It is impossible, in infants, to interrupt the electrode, as it causes a great deal of pain, besides bringing about a condition of fright. The ascending stabile current for the first two or three weeks of the disease, that is, during the acute stages, should precede the application of the labile current.

Massage is also indicated in the treatment of facial palsy, and is of great value not only in stimulating the nutrition of the parts, but in preventing subsequent contractures.

If an incised wound in the soft parts does not heal as readily as it should, examine the urine for sugar.

Repeated attacks of coughing after tracheotomy may mean irritation of the posterior wall of the trachea by the tube; change the length or shape of the canula.

Aluminum instruments should not be boiled in soda solution, like other instruments. They are to be sterilized by boiling in plain water or by passing them through an alcohol or Bunsen flame.

The threading of catgut or kangaroo tendon through a needle-eye not very roomy may be made easy by cutting the suture end obliquely and flattening it between the handles of the scissors. Silk must not be cut obliquely, however, for this makes it apt to unravel while it is being threaded.

The use of an "invalid table," the shelf of which projects over the patient's body, will be found a great convenience during operations as a receptacle for instruments in immediate use. It saves time and temper, and avoids accumulation of instruments on the patient's body.

A LIGHT-BEARING cystoscope is a handy instrument for the non-specialist to use for transillumination of the accessory sinuses of the nose. Place the tip of the instrument in the patient's mouth and let him close his lips firmly.—*American Journal of Surgery*.

Proceedings of Societies.

HURON MEDICAL ASSOCIATION.

The regular meeting of the Huron Medical Association was held in Clinton on May 30th, with the following members present: Dr. N. W. Woods, President, Bayfield; J. W. Shaw, Secretary, Clinton; W. Gunn, Clinton; J. P. Kennedy, Wingham; Lorne Robertson, Stratford; Alex. McKenzie, Monkton; Hamilton, Belgrave; J. Lindsay, Blyth; Weir, Auburn; J. N. Gunn, Clinton; McCallum, Londesboro; Turnbull, Goderich; McFadden, Hensal, and Thomas Gray, St. Thomas. The president gave an address on "Medical Ethics and Lodge Practice." For transportation of bodies on railways and filling the papers, he suggested, a fee should be made. In notification of contagious cases the Government should allow a fee in each case, similar to births and deaths, and suggested that the secretary of the Provincial Board of Health be notified of our suggestions. Papers were read by Drs. Kennedy, W. Gunn, McKenzie and J. N. Gunn, which appear in full in this Journal. Dr. Gray, of St. Thomas, exhibited skiagraphs, illustrating fractures before and after diagnosis and treatment. His remarks showed how the best physicians and surgeons often err in their diagnoses of fractures. Each of the papers came in for a full discussion.

FREQUENTLY referred to the surgeon because of the constant pain and marked tenderness, is to be noted a group of cases of what might be termed *occupation wrist pain*. They differ from the ordinary case of "writer's cramp," "piano-player's cramp," etc., in that, while these latter frequently have pain in, or about, the wrist, the cases here referred to have no spasm, the pain is constant, and it is not of a neuralgic character. Sometimes it radiates along the thumb (as in mail-openers); sometimes it is localized to the inner border of the lower end of the ulna, which is very sensitive to pressure (as in shirt-ironers). The fingers are free. There may be pain in the forearm muscles (flexors). — *American Journal of Surgery*.

Physician's Library.

International Clinics. Vol. I. Sixteenth series, 1906. Philadelphia and London: J. B. Lippincott Co.

This is one of the best volumes of the International Clinics which has been issued. In treatment, the subjects dealt with are: "The Medical Treatment of Exophthalmic Goitre," "The Treatment of Gastroparesis," "Coughing, and Its Relation to Treatment," "The Dechlorination Treatment in Diseases of the Heart," "Indications for and the Methods of Performing Venesection." Casey A. Wood has a good article on "Death and Blindness as a Result of Poisoning by Methyl, or Wood Alcohol and Its Various Preparations." There is another good article on "The Causation and Treatment of Eclampsia." Over one hundred pages are given up to a review of the progress of medicine during 1905.

Case Teaching in Medicine. A series of graduated exercises in the Differential Diagnosis, Prognosis and Treatment of Actual Cases of Disease. By RICHARD C. CABOT, A.B., M.D. (Harvard), Instructor in Medicine in the Harvard Medical School, and Physician to Out-Patients at the Massachusetts General Hospital. Boston: D. C. Heath and Co.

There is something unusual in this book. It represents the histories of a series of cases set out clearly and then analyzed. It illustrates Dr. Cabot's method of instructing students, and will be found valuable by all students of medicine.

The Theory and Practice of Medicine. By FREDERICK T. ROBERTS, M.D., B.Sc., F.R.C.P., Fellow of University College, Emeritus Professor of Medicine and Clinical Medicine at University College, Consulting Physician to University College Hospital, etc. In two volumes. Price, 26s. net. Tenth edition. London: H. K. Lewis.

Roberts' was formerly a leading text-book in the medical schools of Canada until it was largely displaced by Osler. It, however, was a work of the highest authority and order. It is

still a text-book in medicine on the curricula of our colleges, but the fact that it has been so long since the ninth edition appeared rendered it behind the times, especially in pathology, bacteriology and much of the modern methods of treatment. The two volumes before us are satisfactory. They are royal 8vo., and embrace together 1,382 pages. The work largely embraces the personal experiences and observations and opinions of the distinguished author, and hence for that reason alone all the more valuable. It has been brought up to present-day medicine, and is in every way a work of the first magnitude.

Taber's Pocket Encyclopedic Medical Dictionary. Edited by CLARENCE W. TABER, and published by him at Chicago, will prove a handy volume for medical students during their course of studies. At lectures or clinics the word whose meaning is not known can readily be looked up.

We desire to call the attention of our readers to the advertisement of A. C. Butters & Co., New York, in this issue. These standard sets are gotten up in nice, tidy style, and anyone procuring any of them will be satisfied with their general make-up and typography.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

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The Association expects and hopes for the united support of the profession.

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Dominion Medical Monthly

And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVII.

TORONTO, JULY, 1906.

No. 1.

COMMENT FROM MONTH TO MONTH.

The Canadian Journal of Medicine and Surgery has issued a handsome special number, a British Medical Association meeting number. Altogether it embraces reading matter and illustrations 112 pages, advertisements 147 pages. Such commendable journalistic enterprise as this should receive nice encouragement from the general profession.

Startling are the shocks which periodically emanate from the United States. We say United States, as, if we said America, one would think we were away on a holiday abroad. Fast following on the insurance scandals comes the "Great American Fraud," the San Francisco disaster and the slaughterhouse atrocities of Chicago and one or two other western cities. The United States of America is a great nation; so one must consequently look for something on a large scale and altogether out of the common now and again. The invitation to the British Medical Association, when convening in Toronto, to send a special committee to Chicago to investigate the conditions pre-

vailing in the slaughter houses and packing houses, would no doubt prove a very nice and enjoyable trip to the special committee, a sort of medical High Jointers' jamboree.

The Boston meeting of the American Medical Association of 1906 seems to have been a record-breaker, there having been nearly 5,000 physicians registered. It appears to have been an emphatic endorsement of the plan of campaign as set forth in the organization, in progress, in the establishment of county societies and closer affiliation of State societies with the national organization. It proves beyond the shadow of a doubt that organization counts for a great deal, and that the time and the day has come when the profession of medicine, not alone in the United States, but in Canada as well, and in other countries, must stand united, and not continue to work alone, as in former days. It is said to have been the largest medical meeting ever held.

When the national medical association of our neighbors to the south of us is showing such splendid evidences of growth and development, it seems appropriate for Canadians to be up and doing. Indeed, for too long have we lagged; but a start has been made. It is most important that a very representative meeting should gather in Toronto this year, on the afternoon of the 20th and the forenoon of the 21st of August. The Special Committee on Reorganization appointed at Halifax last year will have a report to bring in; and every province should have a large delegation present to discuss the various phases of that report. The welfare of our national medical organization should excite the keenest interest in the breasts of all its members, of whom there are now nearly 1,500. No doubt when reorganization is accomplished there will be a large influx of new members.

It will not be long before some enterprising chemist has upon the market as a toilet preparation of great value and unique handiness, the box of calomel ointment, as, according to Pro-

fessors Metchnikoff and Roux, syphilis may be arrested by rubbing the site of inoculation soon after infection, with calomel ointment. These scientists have recently made thirteen experiments upon monkeys, and with such striking results that a medical student of Paris submitted his body for experiment, and was inoculated with the virus from two separate and distinct hard chancres. One hour thereafter the site of inoculation was rubbed with the calomel ointment, and at the end of three months not a single sign of the disease had manifested itself. This is all the more striking as several monkeys inoculated at the same time with virus from the same sores either died or contracted the disease. Thus there is hope that a disease which has spread its ravages for many centuries may at last become subservient to the calomel gallipot.

An item appears in a recent number of the *British Medical Journal* anent the approaching meeting, which, if it were not written in a serious mood, might be considered a trifle humorous. Altogether, it is ridiculous. Delegates coming out are advised to carry along a bottle of shoe shine, as "it is a very difficult matter to get a shoe shine in Canada." Evidently these delegates are expected to take to the woods once they arrive on Canadian, which is also British, soil. The silk hat as affected in European capitals is altogether out of place in Canada. That was another very bright bit of wisdom. The temperature in August in Toronto is said to be 66 F. Probably it is; but sometimes it is 100 F. Good, heavy woollen clothes for ocean travel are just the thing, too, when the thermometer is at 100 F. Really, it is too bad we are so very far behind the times. It is to be hoped that it doesn't snow. Probably the Dawson rainmaker might be engaged to keep the snow away during the week of the meeting.

Science Notes.

Respiratory Power and Its Limits.

Nowadays, when questions of steerable balloons, airships and aeroplanes are the *piece de resistance* of many scientific and other journals, the side issue suggests itself with renewed vigor in the form of a vital problem, to wit, to what height can an aeronaut ascend without losing his life? Some twenty years ago experts stated that it was impossible to exceed an altitude of from 26,244 to 29,523 feet. Accidents were likely to occur at 19,683 feet and, after this altitude, the aeronaut becomes insensible. Mr. Paul Bert, however, demonstrated that it was possible to avoid the risk of suffocation at great altitudes by repeated inhalations of oxygen, and it was due to the use of oxygen that some three years ago Messrs. Besson and Suring succeeded at Strasburg in reaching the highest altitude ever attained, viz., 34,770 feet; even then, despite a liberal use of oxygen, one of the intrepid aeronauts fainted.

A few years ago Prof. Musso, of Turin, made some researches in connection with the question of asphyxiation at great altitudes, and he came to the conclusion that to enable the influence of highly rarefied air to be successfully combated, it was necessary to inhale oxygen mixed with a strong proportion of carbonic acid.

Mr. Agazzotti, one of Prof. Musso's pupils, has now just taken up again the experiments commenced by his old master. Instead of making an ascent in a balloon, he had himself inclosed in a large bell, in which the air, by means of a pump, was gradually rendered more and more rarefied. The bell was provided with a tap, communicating with the outer air, by means of which and a small pump the foul air was expelled. The experimenter then covered his face with a specially constructed mask provided with two valves; one of these enabled the air expired to escape, while the other permitted the inspiration of a mixture of 67 per cent. oxygen, 13 per cent. carbonic acid, and 20 per cent. nitrogen.

When thus equipped Mr. Agazzotti entered the bell, and, in half an hour's time, the air was rarefied up to a pressure of 440 millimetres, almost equal to the atmospheric pressure prevailing on Mont Blanc. Mr. Agazzotti seemed to be suffering no inconvenience at this time, but, a few minutes afterward (when the

rarefaction of the air had reached 360 millimetres) symptoms of asphyxiation were observed. The mixture of oxygen and carbonic acid was now brought into play, and an immediate improvement was noted in the condition of the subject in the glass bell. The pressure was now brought down to 140 millimetres, and, more marvellous still, even to 122 millimetres of mercury. On leaving the bell Mr. Agazzotti said to the attendants: "I could have stood a still greater rarefaction, as my memory was quite clear, and my power of movement normal."

As a matter of fact, upon the occasion of a third experiment made quite recently, the rarefaction of the air produced in the bell corresponded to that prevailing at an altitude of $14\frac{1}{2}$ km. (9 miles), thus exceeding by 4 km. ($2\frac{1}{2}$ miles) the greatest altitude ever reached by man—even in a practically semi-conscious condition. The experiments made by Mr. Agazzotti, therefore, show that with the use of the mixture prescribed it will be possible for the aeronaut of the near future to render great services to science at large.—*Scientific American*.

Prevention and Mastery of Disease.

It is probable that most of us have heard more or less about the remarkable success which attended the efforts of the Japanese to prevent and control disease among their armies in Manchuria; but it has remained for Major Louis L. Seaman to place the full facts before the world in a work to which he has given the appropriate title, "Real Triumph of Japan." The high reputation of Major Seaman as an army surgeon, and the fact that his assertions are based upon personal observation during his presence with the armies in Manchuria, place the statements contained in his work, extraordinary though they be, beyond all question as to their veracity and accuracy.

It is shown by Longman's Tables that for nearly two centuries past, in wars that extended over any great period of time, on an average at least four men have perished from disease to every one who has died of wounds. In the late Boer War 8,221 officers and men were sent home on account of wounds, while 63,644 were invalided home by disease. Major Seaman quotes from Vital Statistics for 1898, in which the Surgeon-General of our army shows that while deaths from battle casualties were 293, those from disease amounted to 3,681, or 14 from disease to 1 from casualty. These surprising figures are compared with

the record made by the Japanese. The Japanese statistics show that from February, 1904, to May, 1905, although 52,946 were killed or died from wounds, only 11,992 died from various diseases. That is to say, only one died from sickness to every four and one-half men who died in battle or from wounds.

This complete reversal of the statistics of the two leading nations of western civilization constitutes, according to Major Seaman, the real triumph of Japan; for it is a fact that in their war with China only ten years before, the Japanese lost about the same average as that which prevailed during our own Civil War, namely, three from disease to one from bullets. In that war they realized that disease was even more fatal than the enemy's weapons, and in the intervening years they set out to master the invisible foe, with a success to which the statistics, as above given, bear eloquent testimony. These results were obtained by careful study of military sanitation and hygiene, and by a most thorough bacteriological examination of the water along the line of march and in the vicinity of the camps. The water-testing outfit formed part of every sanitary detachment, and every foraging and scouting department was accompanied by a medical officer, who made an examination of the water to be used by the troops. In view of the extraordinary facts developed as the result of Major Seaman's investigation, it is not putting the case too strongly to say that, as matters now stand, the medical corps has as much, if not more, to do with the winning of campaigns and the mitigation of the horrors of war as any other department of the army.—*Scientific American*.

Recent Experiments in the Preservation of Meat.

In a report by the Italian Minister of Agriculture on the subject of refrigerating in Italy, Mancini gives some interesting results obtained by the Craveri process for preserving meat, a process which was much discussed some months ago, but of which a more definite idea can now be formed, since a series of experiments has been conducted under the direction of a number of university professors.

The Craveri method would seem to have solved the problem hitherto unsolved—of preserving meat in a form fit to be eaten, by means of chemical treatment. Excluding for hygienic reasons ordinary antiseptics, and recognizing as insufficient for practical purposes the usual method of salting, Craveri resorts to injec-

tions into the veins of slaughtered animals, from which the blood has been drained, of a solution of 100 parts of water, 25 of kitchen salt, and 4 of acetic acid; in other words, of a solution of a mixture of substances such as are found normally in our bodies, and which form part of our nourishment. The solution is injected to the amount of one-tenth of the weight of the living animal. Prof. Brusaferro, of Turin, experimented upon two animals, a sheep and a calf; the two carcasses were hung in a subterranean room for 75 days, at a temperature of 16° C. (about 61° F.). After this time they were skinned, dressed, and cut up. The heart, brains, liver and intestines seemed somewhat macerated, but were normal in appearance. The fat beneath the skin was perfectly preserved, the flesh appearing bright red in color, moist, and giving out an agreeable, slightly acid odor. In no part was there any trace of putrefaction, even incipient. This meat broiled produced an excellent broth, resembling in every particular that obtained from fresh meat. Roasted, it was tender, and even tasted better than ordinary meat, was digestible and nutritious. As a result of these and other experiments, Prof. Brusaferro declares it as his opinion that the Craveri method promises great advantages over others. The other professors engaged in the experiments came to exactly the same conclusions. Submitted to a bacteriological examination, the meat proved to be free from bacteria; in the long period of preservation given, the beginning of dissolution was noticed in the visceral and muscular tissues, but without the production of any toxic principle whatever.—*Scientific American*.

HEMORRHAGE from the bladder may yield to irrigations with ice-cold water and with 1-10,000 adrenalin solution, successively. —*American Journal of Surgery*.

DURING the conduct of a narcosis, more important than the activity of the conjunctival reflex or the actual size of the pupil in determining the depth of the anesthesia, are the *changes* in the reactivity of the lid and the alterations in the size of the pupil. They are reliable indices to fluctuations in the depth of the narcosis. Sometimes a patient is quite relaxed and anesthetic although a fair conjunctival reflex is present; and, again, it may occasionally happen that a patient reacts even when that reflex is abolished.—*American Journal of Surgery*.

News Items.

THERE is a small epidemic of typhoid fever at St. John, N.B.

— DR. ROYAL WHITMAN, New York, has been visiting in Montreal.

DR. SOFTLEY, of Claude, has been appointed a coroner for the County of Peel.

DR. COOPER, of the Winnipeg General Hospital house staff, has located at Sperling, Man.

IT is stated the Ontario Medical College for Women, at Toronto, will be discontinued.

SENATOR DR. L. GEO. DEVEBER, Lethbridge, Alta., has been visiting in Toronto over Victoria Day.

A CLASS of 22 nurses was graduated from the Winnipeg General Hospital on the 22nd of May.

THE death is announced of Dr. Reuben Curry, Guelph, Ont. He was one of the oldest practitioners in that district.

DR. A. EDMOND BURROWS has been appointed jail surgeon at Parry Sound Jail, in the place of Dr. Hugh C. McLean.

JOHN GRAHAME, M.D., has started to practice at Mono Road. Dr. Grahame is a former principal of Bolton Public School.

DR. HONSBERGER, a well-known Stayner physician, dropped dead in his office a few days ago. Heart failure was the cause.

DR. SPROULE, of Markdale, has been re-elected Sovereign Grand Master of the Orange Order of British North America.

DR. E. P. LACHAPELLE has resigned as Superintendent of Notre Dame Hospital, Montreal.

DR. P. H. BRYCE, Chief Medical Officer of the Department of the Interior, has been inspecting in the Maritime Provinces.

House surgeons for Toronto General Hospital are now chosen by competitive examination.

THE funeral of Dr. J. C. Stinson, who was killed in the San Francisco disaster, took place at Brantford, Ont., on May 7th.

DR. J. H. EMORY, Gravenhurst, Ont., has been invited to advise in the preparation of plans for a State sanatorium in Wisconsin.

DR. C. DICKIE MURRAY, Halifax, we are pleased to announce, is convalescing rapidly from an eight weeks' illness from pleurisy.

DR. G. E. LONG has been elected President of the Blyth Public Library Board, to fill the vacancy caused by the removal of Dr. Lindsay.

DR. N. J. TAIT, of Ingersoll, was presented with a gold-headed umbrella and address by his friends prior to his departure for Europe to study.

DR. L. DE LOTBINIER HARWOOD has been appointed General Superintendent of Notre Dame Hospital, Montreal. He is a graduate of Laval of 1890.

DR. ANDREW MACPHAIL, editor of the Montreal Medical Journal, is the author of a book highly spoken of and which has just appeared.—“The Vine of Simbah.”

THE District Labor Council of Toronto will seek to induce the Trustees of Toronto General Hospital to allow public ward patients choice of their own physician.

WINNIPEG General Hospital during the week ending May 19th treated 326 patients, 172 being men, 111 women, and 43 children; 107 out-patients were also treated.

THE Anti-Tuberculosis Association of British Columbia is making a personal appeal to all residents of British Columbia for subscriptions towards a consumption sanatorium.

THE local committee of the Dermatological Section of the British Medical Association desires any doctor who has any interesting case of skin disease, to communicate with the secretary, Dr. D. King Smith, 311 Jarvis Street, as arrangements for presentation of cases at the clinic will be made by the committee.

DRS. ROGERS and Tait, of Ingersoll, have dissolved by mutual consent the partnership which has existed for the past few years, and the practice will be conducted by Dr. Rogers.

DR. FRANCIS J. SHEPHERD, Montreal, Professor of Anatomy in McGill, has been elected president of the Montreal Art Association, in succession to Sir Geo. A. Drummond.

By the will of the late Miss Elizabeth Orkney, of Montreal, the Montreal General Hospital will get \$50,000, and the Protestant Hospital for the Insane at Verdun a like amount.

DR. ROBERT CRAIK, LL.D., Montreal, died on the 28th of June, at the age of 77 years. Deceased was Dean of the Medical Faculty of McGill for eleven years prior to Dr. Roddick.

QUEEN'S Medical Convocation took place on the 12th of April. Dr. C. K. Clarke, Superintendent of the Toronto Provincial Hospital, received the honorary degree of Doctor of Laws.

DR. R. H. RICHARDS, formerly a practitioner at Winnipeg, but latterly ship surgeon on the "Miowera," sailing from Vancouver to Australia, committed suicide at Vancouver on June 15th.

DR. S. J. BOYD, an old Listowel boy, who at one time taught in the Carthage section, has spent a year in the London hospitals, and obtained the degrees of M.R.C.S., and L.R.C.P., London, England.

THE thirteenth annual Sanitary Report of Nova Scotia states that there have been serious outbreaks of cerebro-spinal meningitis in Lunenburg and Victoria Counties, with a mortality of about ten per cent.

THE Corporation of McGill University have approved of a resolution submitted to them by the Medical Faculty, advising the extension of the present medical course to five years. It is likely the change will go into effect in the session of 1907-8.

THREE cases of typhus fever are said to have developed in Winnipeg. The statement is made in the public press that there has been no typhus fever in Canada for fifty years. Five thousand are said to have died of it in Montreal at that time.

DR. E. D. CARDER, son of M. D. Carder, Grand Recorder of the A.O.U.W., Toronto, after spending a year in the hospitals in London, England, has decided to locate in Vancouver, B.C., and is now temporarily acting as superintendent of the General Hospital there.

NOTICE.—The Executive Session of the Ontario Medical Association will be held in Toronto on Monday, the 20th of August, at 8 p.m. All members are respectfully requested to attend, in order that the business of the year may be finished, including election of officers for ensuing term.

THE seventh annual meeting of the British Columbia Medical Association will be held in New Westminster on August 1st and 2nd. Discussions will be had on the subjects of "Patent Medicines" and "Life Insurance Examination Fees." A number of medical men from the State of Washington will take part.

CANADIAN members of the British Medical Association who intend to avail themselves of the special rate, single-fare \$67.25, excursion to the Pacific Coast at the close of the meeting in August, should communicate their intention at once to the General Secretaries, Medical Laboratories, University of Toronto, in order that information may be given to the railways of the probable number for which provision must be made.

AT the instance of the College of Physicians and Surgeons, the Ontario Government is asking the Court of Appeal to construe Clause 49 of the Ontario Medical Act, with a view to determining whether those practising medicine without the use of drugs are entitled to charge for their services. Osteopaths and persons who give electrical treatment not registered under the Act, and the idea is to find out whether they do not under Clause 49 come within the Act.

FOLLOWING is the list of successful candidates in the competitive examination for the positions on the intern staff of the Toronto General Hospital, held on Tuesday and Wednesday of this week: W. F. Lemon, Aylmer; J. A. Kinnear, Toronto; C. S. Strathy, Toronto; F. J. Munn, Toronto; C. E. Spence, Toronto, and A. G. Wallace, Humber. The names appear in order of merit. These will receive their positions, provided they

are successful in passing their examinations in the Collège of Physicians and Surgeons of Ontario. A further examination will be held for the position of first assistant in the clinical and pathological laboratories.

FISHING AND SHOOTING.—A new region, known as the "Temagami" (pronounced Tem-mog-a-me) District, is being brought to the notice of the public as one of the finest fishing and hunting confines in Canada. Excellent sport is assured all who take advantage of a trip to this magnificent territory which is 300 miles north of the city of Toronto at an altitude of 1,000 feet above the sea. Black bass, speckled trout, lake trout, wall-eyed pike and other species of fish are found here in abundance, and large game such as moose, caribou and deer abound in the forests. A handsome booklet, profusely illustrated, giving all information, including comprehensive maps, can be had free on application to J. D. McDonald, D.P.A., Union Station, Toronto.

AMONG the recent graduates of Manitoba Medical College most have gone out to take up the practice of their profession here and there in Manitoba and the North-West. Dr. J. T. Cooper is at Sperling, Man.; Dr. C. R. Dudderidge at Snowflake; Dr. G. N. Giles at Miniota, and Dr. A. Moir at Lenore. Dr. A. W. Montague has opened an office in Winnipeg, while Dr. J. J. Mugan has gone to practice at Langdon, N.D. Dr. Riddell will likely go to Crystal City. Dr. F. A. Smith is at Medicine Hat, and Dr. J. D. Stewart at Darlingford, Man. Dr. G. M. Stuart is at Creelman, Sask., Dr. J. E. Tisdale at Baldur, and Dr. A. E. Walkey at Selkirk. Drs. R. B. Mitchell, G. P. Bawden, W. W. Musgrove, D. A. Stewart, C. Kerr, H. O. McDiarmid and E. Hudson will be house surgeons for the ensuing year at the Winnipeg General Hospital. Others have not yet definitely located.

THAT London is to have a Hygienic Institute is confirmed by a statement made by Premier Whitney and communicated to the medical men there. When the supplementary estimates were brought down \$50,000 was apportioned Kingston to go to the Medical Department of Queen's University for educational purposes in that line. "A similar amount will go to London next year," said the Premier. The estimate that was named by the medical fraternity of London for the Hygienic Institute was

\$75,000, but the Provincial Legislature evidently follow the tactics of the Dominion House, and do not grant the full amount the first year. The amount London asked for, \$75,000, is a liberal estimate as to the cost of the institution, but should the required amount run over the \$50,000, there is no doubt it will be forthcoming.

THE Trustees of the Hospital for Sick Children, Toronto, have appointed the following staff for the year commencing July 1, 1906: Consulting Staff: Surgical—Dr. R. B. Nevitt, Dr. G. A. Peters, Dr. N. A. Powell. Medical—Dr. A. McPhedran, Dr. H. C. Scadding, Dr. R. J. Wilson. Surgical Services: No. 1—Mr. Irving H. Cameron, senior; Dr. A. Primrose, associate; Dr. B. Milner, junior. No. 2—Dr. G. A. Bingham, senior; Dr. F. N. G. Starr, associate; Dr. Charles Shuttleworth, junior. The surgical services are co-equal in status. They are numbered separately for convenience. Orthopedic Service: Dr. Clarence Starr, senior; Dr. W. Gallie, Toronto, associate. Medical Services: No. 1—Dr. H. T. Machell, senior; Dr. W. B. Thistle, associate; Dr. R. D. Rudolf, junior. No. 2—Dr. Allan Baines, senior; Dr. J. T. Fotheringham, associate; Dr. H. C. Parsons, junior. The medical services are co-equal in status. They are numbered separately for convenience. Isolation Wards: Medical—Dr. William Goldie, Dr. C. J. Copp, associate. Surgical—Dr. S. Westman, Toronto. Specialists: Eye—Dr. R. A. Reeve, senior; Dr. James MacCallum, associate; Dr. W. Lowry, junior. Ear, Nose and Throat—Dr. G. Wishart, senior; Dr. G. Boyd, associate; Dr. D. N. MacLennan, junior. Pathologist: Dr. T. D. Archibald. Anesthetist: Dr. Alan Canfield. Registrars: Surgical—Dr. E. Stanley Ryerson. Medical—Dr. H. S. Hutchison. Director of the Roentgen Rays Department: Dr. Samuel Cummings. Residents: Dr. A. C. Bennett, from January 1, 1906, to December 31st, 1906; Drs. A. H. Rolph, James C. Masson and Robert E. Woodhouse for one year each, from July 1, 1906, and R. A. Jones and Fred. W. Manning for one year each, from January 1, 1907.

THE special committee to which was referred the question of deleterious or fraudulent medicines organized on May 14th, and elected Hon. Mr. Templeman chairman. It was decided to gather information respecting legislation enacted or proposed on the subject in the provinces of Canada and in the United States.

Mr. H. H. Dewart, K.C., Toronto, submitted a draft bill on behalf of the Proprietary Medicines Association, based on the resolutions passed at the annual meeting in December last. This bill makes provision that each person, firm or corporation manufacturing or importing for sale in Canada any medical preparation or preparations shall submit to the Department of Inland Revenue yearly a statement showing whether such preparation contains alcohol or any of the poisons mentioned in the schedule to the bill. The Minister may then make further inquiry as to whether the preparation is a legitimate medicinal preparation or whether alcohol is used in excess, or poisons in quantity dangerous to health. Then the Minister has power, where alcohol or such poisons are used, to compel the production of the formula of the preparation for his confidential use, and where an analysis does not agree with the statement submitted or the preparation is found to be dangerous or unfit for use, there may be a hearing, and in case of adverse decision the Minister may order the printing on the wrapper of the percentage of alcohol or poison and the manufacture and further sale of such medicine in Canada shall be prohibited. Penalties from \$50 to \$500 are provided.

TUBERCULOSIS EXHIBITION.—An exhibition that will surely be unique and distinctive in a city noted for its expositions and conventions, is to be given in Toronto for two weeks, commencing Monday, August 21st. This exhibition had its inception in New York rather more than six months since, conducted by the National Association for the Study and Prevention of Tuberculosis, with leaders in the movement like Dr. Herman H. Biggs, Dr. S. A. Knopf, Dr. Lawrence F. Flick, Dr. Vincent Y. Bowditch, taking a prominent part in the management. So great was the interest stirred up in New York that since then, by invitation, the exhibition has been shown in Boston, Chicago, Philadelphia, Milwaukee, Indianapolis, Cleveland and other leading cities. In the early spring successful efforts were made by the National Sanitarium Association of Canada to have this exhibition brought to Toronto in the month of August. The date has been fixed so that the exhibition will open during the week of the meetings of the British Medical Association, and will continue the following week, which will be the first week of Canada's National Exposition. The exhibition is of a size that requires a building sufficient to allow of 5,000 feet of wall space, besides large floor space and accommodation for the holding of

meetings. One hundred and two different exhibits will be made, including large exhibits from Paris, Switzerland, Massachusetts State Sanitarium, Phipps Dispensary, Johns Hopkins Hospital, Henry Phipps Institute, of Philadelphia; White Haven Free Hospital for Poor Consumptives, Agnes Memorial Sanitarium, Denver, Col.; Adirondack Cottage Sanatorium, Health Department, of New York City; in fact, from almost every association interested in fighting the white plague by whatever means. Prominent in the New York exhibition, and in other cities where given, was the exhibition made by the Muskoka Cottage Sanitarium, the Muskoka Free Hospital for Consumptives, and the Toronto Free Hospital for Consumptives. These will be repeated in the exhibition in Toronto. The exhibition will be one of peculiar interest to medical men, social reformers, sanitary scientists, to governments, in fact, to the great mass of the people interested in social and economic questions. Mr. J. S. Robertson, Secretary of the National Sanitarium Association, who has the work of the exhibition in hand, is not prepared at this writing to give in detail the names of those who will take part in the educational progress prepared for each evening, but the first draft of the programme prepared includes names of leading professional and laymen of Great Britain, United States and Canada, further particulars of which will be given a little later.

THE following resolution was adopted on board the steamer *Brockville*, en route to Montreal, June 3, 1906:

Whereas, the members of the American Medical Association, en route to Boston, via the Grand Trunk Railway System, including the Missouri Valley Special, Iowa and Chicago delegation, were cordially entertained during their visit to Toronto, on June 2nd, by the Canadian and Ontario Medical Associations, Ontario Medical Library Association, Toronto Clinical, Medical and Pathological Societies;

Whereas, we, as a body, including our wives and families, enjoyed to the fullest extent our entertainment at luncheon at the Toronto Medical Library; and,

Whereas, we were accorded the hospitality of the Queen City, its provincial and municipal institutions, and were furnished auto transportation over their beautiful city; therefore,

Be it resolved, that a copy of these resolutions be transmitted to Dr. G. A. Bingham, President Ontario Medical Association; Dr. R. A. Reeve, Dean Medical Faculty, University of Toronto; to the officers and members of the Ontario Medical Library

Association, to the Reception Committee, to the daily press of Toronto, and the editor of the *Journal* of the American Medical Association, for publication. (Signed) Committee: A. E. Prince, J. A. Downs, T. J. Schweer, Edwin B. Shaw. Representing the Chicago, Iowa and Missouri Valley delegation: H. Liston, Montgomery, E. E. Dorr, Chas. Wood Fassett.

BRITISH MEDICAL ASSOCIATION, TORONTO, ONT., AUGUST 21ST TO 25TH, 1906.—1. *Fares, Going Dates and Limits.*—(a) Domestic business, certificate plan arrangements; free return regardless of number in attendance; passengers going rail, returning R. & O. Nav. Co., or *vice versa*, rate to be one and one-half fare. (b) European business.—On presentation of certificate, to be prepared and signed by the Secretary of E.C.P. Association, and countersigned by the Secretary of the Canadian Committee, or Secretary of the British Medical Association, one-way tickets to be issued at one-half lowest one-way first-class rail fare; round trip tickets at lowest one-way first-class rail fare between all points in Canada. Rates to Pacific Coast subject to concurrence of T.C.P. Association. Steamship lines to advise Secretary what, if any, additional arbitraries are required. Dates of sale, July 1st to September 30th, 1906, inclusive. Final return limit, September 30th, 1906. 2. *Extension of Time Limit.*—On deposit with joint agent of standard convention certificates issued from points in the Maritime Provinces, from points west of Port Arthur and from points in the United States, on or before August 28th, 1906, and on payment of fee of \$1.00 at time of deposit, an extension of time until September 30th to be granted. Joint agency to be conducted in the name of G. H. Webster, Secretary E.C.P. Association, will be kept open from August 21st to September 15th, 1906. 3. *Side Trips.*—Side trip tickets to be sold from Toronto to delegates from the Maritime Provinces, from all points west of Port Arthur and from the United States, on presentation of validated certificate, or deposit receipt, at lowest one-way first-class fare for the round trip, to all points in Canada. Dates of sale, August 23rd to September 1st, 1906, inclusive. Return limit, September 30th, 1906. Usual additional arbitraries *via* Upper Lake steamships to apply, viz., going lake

returning same, \$8.50 additional to be collected; going lake, returning rail, or going rail returning lake, \$4.25 additional to be collected. Also usual arbitraries *via* St. Lawrence route, for delegates desiring to return by steamer, on presentation of tickets to purser, viz., \$6.50 Toronto to Montreal; \$3.50 Kingston to Montreal. *Via* Northern Navigation Company, on lines where meals and berth are not included, the rail rate will apply; on lines where meals and berth are included, rate to be single fare, plus meal and berth arbitrary.

Publishers' Department

OBSERVATIONS IN THE TREATMENT OF IRREGULAR MENSTRUATION.

BY A. W. SHIELDS, M.D., EATON, COLO.

In prescribing a new and comparatively unknown remedy, the conscientious physician must work slowly and carefully along lines which are necessarily of a more or less experimental nature! In my own experience, I have always found it hard to desert an old, well-tried preparation and transfer my faith to one which, though highly recommended and endorsed by reputable physicians, is known to me only through such recommendations and endorsements! But in the case of Ergoapiol I feel differently; for, when I first encountered it, the mere name in some way appealed to me as descriptive of a preparation or combination which I thought ought to prove efficient in the treatment of that class of cases for which it is recommended. I have in the latter part of my sixteen years' experience been a great believer in apiol as an emmenagogue, and especially in those painful cases which occur in young girls, who have just reached the menstrual period, and in whom functional inactivity is the chief cause which retards the normal process of nature.

But, after many successes and a still larger number of failures, due, I believe, to the unreliability or instability of the drug, I resorted to Viburnum and the various compounds con-

taining it. My clinical experience with it was fairly satisfactory, but I was still on the lookout for "something better," when it was my good fortune to run across Ergoapiol (Smith). This was only about six months ago, when it was recommended to me, while in consultation with a physician in my locality, and the results were more than satisfactory.

Still, as often happens, through force of habit, I believe, I forgot it for the time being, and wandered back to my old routine, and it was not until my attention had once more been drawn to Ergoapiol by the receipt of a sample package that I once more prescribed it. I was just then wrestling with a case of obstinate amenorrhea, and it was on this case that I expended ten of the capsules, giving one every three or four hours. These proved sufficient to give relief at that particular time, though, of course, I have followed up the same line of treatment ever since with excellent results.

It was then that I began to consider the matter seriously, for I had tried every one of the so-called Standard preparations without feeling any certainty as to results; but, now, as a result of many trials, and but few failures, Ergoapiol is one of the trusted remedies in my armamentarium, and is likely to remain in that class as long as it is obtainable.

I have now had sufficient experience with it in the treatment of cases of uterine and menstrual disorders so common in the every-day practice of the general practitioner, that I have no hesitation in recommending its use.

In this introductory note, I can only say further that the cases quoted below, as having been successfully treated with this remedy, are only such as are met with in every-day practice, and as I regard this class of most practical importance to the general practitioner, I shall give but little attention to those that are only rarely encountered.

Case 1. Mrs. J. N.—I first saw this case in April of this year, and, on inquiry, discovered a history of two abortions, both in the third month of pregnancy. A slight leucorrhea has resulted from the first mishap, but after the second one this became aggravated, and was accompanied by severe pain in the region of the ovaries and an almost continuous backache, both of which were very markedly increased just previous to and during menstruation. Curretment had been performed twice, but without much improvement, and the menstrual periods began to be irregular, both as to time and quantity of flow. At first I applied the usual forms of medication, internally and by douche, but while a slight improvement occurred, it was not until I put

her on Ergoapiol (Smith), as her exclusive internal treatment, that I obtained any marked results. The May period was a week late and somewhat scanty; but those of June and July have come on time, and the amount of flow almost normal; the pain in back and sides is present in a slight degree, and then only during the first two days of menstruation. The color of the discharge is improved (due, perhaps, to the later addition of an iron tonic to the treatment), and in a general way, she is gaining rapidly. In this case I have never used more than four capsules daily, and that number only for a few days previous to the establishment of the flow and for two days thereafter.

Case 2. Mrs. A. N.S., about 30 years of age, consulted me in regard to her condition about three months ago. She gave a history of a rather severe laceration of the cervix, the result of her first confinement, five years ago, but her previous record disclosed the fact also that her menstruation had always been difficult and very painful. After the laceration occurred, the periods became irregular, the flow sometimes being profuse and sometimes very scanty in amount. Pain in the back and iliac regions was severe, and finally it was decided that an operation for the repair of the lacerated cervix must be performed in order to obtain relief. This was done about nine weeks ago, but the condition was but little improved, although a curettment had been done simultaneously with "Trachelorrhaphy." The case having been previously in the hands of another physician, I requested and obtained a consultation with him, during which I suggested the use of Ergoapiol (Smith). To this he agreed, and we prescribed one capsule three times daily for a period of two weeks prior to her next menstruation, with results that surprised not only the patient, but even ourselves. There was still some pain in the regions mentioned above, and the quantity of the flow was still below normal; but, looking at the case from every point of view, and considering the very short time during which the patient had been under treatment, I regard the results as remarkable. Her present condition is good, though a slight leucorrhea remains, and I anticipate an easy menstruation, when next it occurs, which is only a few days hence. She is, of course, still taking the capsules as before, and, indeed, has been doing so right along.

Case 3. Mrs. W. A. J., a widow of three years, had always been irregular in her periods, and had been late (almost eighteen years of age) in commencing. She had never borne any children, and after hearing the usual history of pain and cramping for two or three days previous to the beginning of the flow, and

more or less during its continuance, I made an examination, by which I discovered that the uterus was small, poorly developed and flabby. She was very anemic, and the quantity of discharge had always been small in amount and light in color. I did not hesitate a moment as to treatment in this case, but put her at once on Ergoapiol (Smith), together with Bland's Pill, and recommended a nourishing diet. There wasn't much change at the next period; but the one following, and still more so, the one after that, showed most markedly the excellent results of the Ergoapiol treatment. The uterus had gained much in tone and the cervix in firmness, while the patient herself is now in very good health generally, and has gained almost sixteen pounds since the treatment began.

Case 4. This case is interesting, in so far as it shows the versatility, so to speak, of Ergoapiol, or, to express it more correctly, the varied and unusual forms of uterine and menstrual troubles, in which that valuable preparation may be used advantageously.

Here I shall quote the case of a young lady, Miss M. F. N., 21 years of age, who came under my care four months ago. All kinds of treatment had been tried on her without avail, for although she had passed the age of full womanhood, she had never menstruated. When I first saw her she gave me a history, such as follows: When she was fourteen years of age she, on the 16th day of that particular month, got up in the morning feeling languid and disinclined for exertion of any kind; she had a slight headache, and complained later on in the day of a dragging pain in the back in the lumbar region. The family physician was called, and, naturally enough, diagnosed the approach of her first menstruation, requesting the mother to warn the girl of what she might expect, and leaving some appropriate (?) prescription; Ergoapiol (Smith) being then unknown to him. However, that day passed, and another, and another, without any appearance of a flow, and by the end of the fifth day all the symptoms had subsided. The girl remained comfortable, until about the middle of next month, when the same course of symptoms was passed through again, with similarly barren results.

Thus she had lived, undergoing all sorts of treatment, until I saw her five months ago. I at once, though with difficulty, obtained permission to make an examination, in the course of which I found the uterus flabby and ill-developed, the os small and contracted, while the ovaries, with their appendages, were quite indistinguishable by palpation. I advised dilatation of the os and cervix, and prescribed both special and general tonics;

but although everything was done and the treatment maintained for some time, no improvement seemed to result.

At last I determined to try Ergoiapiol, which had been brought prominently before me just about that time, and I at once began giving it in addition to one or two of my former tonics, which had failed to do the work alone. The results, when the next time for menstruation came around, were easily perceptible, although the patient had only been under the new treatment for twelve days. The uterus had gained some tone, and usual signs of approaching menstruation were more decided, but it was not until the second month that any actual flow appeared. About an ounce was then passed, but at the third month (i.e., the last one I have observed), the discharge was fairly free and of good color, and although the development of the uterus has not yet shown any marked gain, still it has enlarged somewhat in size, and is much firmer in consistency throughout. I do not have a doubt as to the ultimate results, and believe that within a few months the uterus will possess all the features of a comparatively normal organ.—From the *Medical Examiner and Practitioner*.

PHYSICIANS desiring to sell their practices must take every precaution against publicity or inviting opposition. These difficulties are fully overcome when the practice is placed with Dr. Hamill, of the Canadian Medical Exchange, as he binds all prospective buyers legally and morally against piracy, publicity or opposition, before giving the name or address of vendors to anyone. Full particulars can be obtained by writing him for his circulars, which he would advise those thinking of selling to do.

BATTLE & Co., St. Louis, have just issued the tenth of the series of twelve illustrations of the Intestinal Parasites, and they will send them free to physicians on application.

ENTERO-COLITIS.—I was called last August to see an eight months' old boy, who was said to be dying of cholera infantum. He had been treated by two capable men, both of whom agreed that the child could not possibly outlive the day. Every conventional remedy had been tried, and the favorite methods of both men had been exhausted. They frankly admitted that all had been done that could be done. I found the patient almost moribund, and displaying all the symptoms of a child dying of what I diagnosed as entero-colitis. The symptoms, to my mind, were classic, despite the previous diagnosis. The case was turned over to me at 9 a.m., August 7th. A trained nurse was

- already on this case. She is an unusually competent woman, in whom I have the most implicit confidence. Then began one of the hardest battles of some years in my experience. I ordered high enemas of glyco-thymoline in 25 per cent. solution, and warm. Used four ounces at a time, with a soft rubber catheter once every three hours. The child could retain nothing, was in frightful pain, and passing constantly thin, foul-smelling discharges tinged with blood. The child was emaciated to the last degree, and for several days before I was called had been in a semi-conscious state. The poor little baby was a pitiful sight. For nourishment I ordered several combinations to be administered, an ounce at a time, as a rectal clyster following the enemas of glyco-thymoline. I know it is not good practice to give hypodermics to an infant, but this was a grave case. My predecessor had ordered gr. $\frac{1}{64}$ morphine, gr. $\frac{1}{960}$ atropin, sub. q. every four hours, if needed, with strychnine $\frac{1}{240}$ gr., if necessary. I continued this, as the baby was often in intense pain, and there seemed to be no other way. This was my plan of campaign, and I am both thankful and pleased that it was successful. The baby improved from the first, but so slowly that it was scarcely discernible to the parents, but the nurse and myself saw it. After three days the child could take some nourishment per oram. I then gave 2 m. of glyco-thymoline in one ounce of water every two hours before feeding. It began to have short periods of natural rest, and the discharges were in every way improved. At the end of a week (August. 14th) the improvement was quite marked, but we did not relax our vigilance. The hypodermics, except of strychnine, were discontinued. The enemas were continued fifteen days, once every three hours, then at less frequent intervals for a month, then once a day for six weeks. The recovery of the little patient was long and slow, but uneventful. The mother and nurse were devoted, and ably seconded my efforts. At this time the baby is a strong, rosy youngster. It gives me great pleasure to tell you of this case. The experience may be of value, and it certainly proved to my satisfaction at least, the potential possibilities of glyco-thymoline in gastro-intestinal work. May you be speeded in your good work.—By W. O. Corb, M.D., Easthampton, Mass.

THE ROLE OF IRON IN THE NUTRITIVE PROCESS.—It is an established custom of physicians to administer iron whenever a patient with pale, waxy, or sallow complexion complains of extreme exhaustion, muscular feebleness, easily accelerated pulse, aplasia, anorexia and the several symptoms which constitute the characteristic issues of a qualitative or quantitative

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVII.

TORONTO, AUGUST, 1906.

No. 2.

Original Articles.

PATHOLOGICAL REPORT ON A CASE OF SARCOMA OF THE KIDNEY.

BY A. H. W. CAULFIELD, M.B., TORONTO

Resident Pathologist, Toronto General Hospital.

Permission was obtained with difficulty for a partial autopsy only at the last moment, and on this account, some points of interest may have been overlooked.

The following is an analysis of the necropsy, and the histological findings.

Body of an emaciated female child, about 2 1-2 years. The skin presented a peculiar waxy appearance, and the absence of fat was marked throughout. The right kidney occupied almost entirely the abdominal cavity, and lay behind the ascending colon. At the right crus of the diaphragm, was a mass the size and shape of a large pear, the apex of which reached to the hilus of the kidney, without apparently involving the renal vein, or the vena cava. This homogeneous mass was composed of a very soft whitish tissue. No enlargement of the retroperitoneal or mesenteric glands could be felt. There were no adhesions present in the abdominal cavity, and the kidney mass was easily extracted. The ureter was not enlarged. On cutting through the diaphragm, the entire right lung with the exception of a small area in the upper lobe, was replaced by the tumor tissue, which it was impossible to remove intact.

The left lung was everywhere studded with whitish metastatic nodules. No other metastases were found in any part of

the body. The left kidney and other organs, were apparently normal. Gross appearance of the right kidney: weight 1167 gram, measuring 19x13x10 c.m. and reniform in appearance. Anterior surface: At the upper pole there are a few nodular outgrowths, and the suprarenal lies in its normal position and is intact. The centre is slightly lobular, while the lower part is greatly enlarged, and presents a smooth capsule.

Posterior surface: There are several small undulations at the lower pole, but otherwise the surface is smooth.

The hilus has to some extent disappeared owing to the marked hypertrophy of the lips, especially the lower. The relation of the vein, artery and duct is well shown, being widely separated from each other by the growth. The duct from the artery by 5.5 c.m. The surface coloration of a greyish white with patches of a light pink, is due to the white of the new growth and capsule, in contrast with the blood distribution.

On section it is seen that the neoplastic tissue has replaced the kidney parenchyma, with the exception of one or two small scarcely perceptible areas at the border. The tumor growth is very soft, of a greyish white color, and of a similar character throughout. At both poles there are a few small patches of brownish pigmentation; due, as is shown microscopically, to degeneration in an area of hemorrhage.

The kidney capsule is slightly thickened and intact.

The left lung shows beautifully the secondary masses, which everywhere stud the surface. The pleura overlying the pulmonary, is a mixture of grey and pink, and this contrasts with the white of the neoplastic masses. The organ makes a perfect specimen, and on this account has not been sectioned.

The right lung, as mentioned above, was almost entirely replaced by the new growth. Sections from the metastases were obtained from this organ.

MICROSCOPIC SECTIONS.

Low power: The predominant field is composed of grape-like bunches of the neoplastic cells, separated from each other, and supported by connective tissue. Numerous blood vessels traverse these strands of connective tissue, and lose themselves in the spaces that exist within the groups of new growth cells.

High power: The stroma varies from tough fibrous bands to a cellular network, which in places becomes rather intimately mixed with the typical cells of the growth itself. In some fields this cellular stroma assumes a somewhat round-celled sarcomatous appearance.

The round cell is the predominant feature of the growth, though there are a few oblong rather than spindle. In both types the nuclei are large and fragmentary from division and degeneration.

Mitotic figures are few, and the character of the nuclei suggests rapid and direct cell division. In many no protoplasm can be demonstrated, in others this is represented by a narrow margin*staining faintly with eosin.

The grouping of the cells is in many fields distinctly glandular. Within the sarcomatous areas the blood vessels of the stroma merge into large vascular spaces and, while lined in some places by a thin, scarcely evident endothelium, usually the tumor cells from the sole wall to the blood channel.

Generally speaking the fields taken from different sections correspond closely. Nowhere was there found any evidence of other types of tissue, as muscle cells, cartilage, etc., nor were there any remains of the kidney parenchyma within the areas of new growth.

Sections taken from different areas failed to show any renal tissue, with the exception of those taken from the suspicious area close to the border mentioned in the gross description. Here the growth is confined by strong fibrous bands. Beyond this is an extensive area of sclerosis in which figure only the remains of tubules, and malpighian bodies. Gradually the amount of fibrosis lessens, and the parenchyma approaches to the normal as the distance from the sarcoma cells increases. Invasion of the degenerated epithelium by fibro blasts is shown in many fields.

The metastases in the lung show an almost identical reproduction of the primary focus, in type of cell and arrangement. The only difference that might be noted is the absence of the tougher fibrous tissue, the connective tissue being less in amount and more cellular in character.

With the idea of correlating some of the facts of the above case, with those reported by others, I have attempted in the following paragraphs to deal in a very incomplete fashion, with some of the data compiled. At the present time the clinical management of renal growths does not seem to be founded upon a definite pathological understanding of the conditions. In this connection Bland Sutton in his "Tumors, Innocent and Malignant" states that "it is earnestly to be hoped that in future full details of every case may be recorded until sufficient accurate data shall have accumulated to allow of the formation of

satisfactory pathological generalizations." Apparently it must be from the recent cases, and from those to be reported upon in the future, that these can be compiled, for the majority of the reports, in all but late years, fall so far short of the requirements, of an accurate and complete analysis, that they are practically valueless beyond a certain amount of clinical interest. Kelynack, in his treatise on Renal Growths, remarks that at the very outset we are baffled by the confusion resulting from the use, and the misuse of terms. "Much of the material compiled is rendered almost useless for satisfactory comparison in a great measure through faulty or misleading nomenclature."

ETIOLOGY.

The causative agents, as insisted upon by various authors, are large in number.

Cohnheim's theory of misplaced embryonic tissue—faulty segmentation of the provertebral somites, and consequent inclusion of some of these cells in the primitive kidney—seems especially applicable to those cases where, in addition to the sarcomatous tissue, muscle fibre, cartilage, bone, etc., is found.

Ebert, Osler, Gardner, Jacobi, and others support the embryonic theory, with slight modifications.

Trauma, despite the protected position of the kidney in many of the cases reported upon, has been especially emphasized.

In Walker's collection of 142 cases of renal sarcoma, trauma as a marked feature, such as a kick from a horse, blow, etc., is mentioned in 30. Other reports lay equal stress upon this point.

Weigert mentions the exanthemata as one of the incidents frequently preceding the growth.

Calculi: Bright, Morris, and others have reported cases where this factor seemed to be of undoubted etiological importance.

Other factors have in different reports been mentioned, but the above seem to have been most frequently of significance.

Among the predisposing influences are age, sex, and race, though the first is by far the most important. Upon this point there is great uniformity of opinion. Generally speaking the frequency increases from uterine life to six months; from six months to four years the percentage is much higher, and after four years it drops away, a distant period being marked by the 8th year. In fact after this age sarcoma of the kidney is extremely rare in comparison with the foregoing years.

Walker, in a collection of 138 cases, tabulates these as follows:—

7 to 8 months in utero.	2.17 per cent.	4 to 5 years.....	9.42 per cent.
Birth	6.32 " "	5 to 6 "	7.24 " "
Under 6 months	5.07 " "	6 to 7 "	4.34 " "
6 months to 1 year ..	13.04 " "	7 to 8 "	2.17 " "
1 to 2 years	19.56 " "	8 to 9 "	0 " "
2 to 3 "	13.76 " "	9 to 10 "72 " "
3 to 4 "	14.49 " "	12 to 14 "	1.44 " "

Rosenstein in 30 cases includes 12 between the ages of 10 and 80, of which 6 are given as occurring between 40 to 60 years.

These cases are, I think open to criticism, and a possible diagnosis of hypernephroma which, as I will mention, occurs in adult life. Other reports, where a comparatively large percentage occurs in adult life, would come under the same objection.

Starr in a series of 54 cases gives the following:—

Under 1 year	9 cases
1 to 3 years	17 "
3 to 5 "	18 "
5 to 8 "	6 "
8 to 12 "	4 "

SEX: The consensus of opinion seems to favor greater frequency in the male. Birch-Hirschfield opposes this, and endeavors to explain a greater proportion in females, by an earlier disappearance of the wolffian body in this sex.

Kelynack in his book Renal Growths, page 30, gives the different collections of cases tabulated according to age.

From the numerous etiological data it seems possible to state:

First: That we know no more about the cause of pure renal sarcoma, than sarcoma found elsewhere.

Second: That in those tumors presenting types of tissue in addition to the sarcoma cells, the growth probably originated to some extent, from misplaced embryonic tissue.

Third: That the stimuli whatever they are, needed to irritate the tissues into rapid growth, are most frequently obtained during the early years of life.

Fourth: There seems to be no reason to exclude the pure forms from an embryonic origin, inasmuch as the sarcoma cells may completely outgrow the other forms of tissue.

Taking for granted that many of the sarcomata of the kid-

ney, are derived from embryonic inclusions, and also, that the hypernephroma arise from misplaced adrenal rests, one seems at a loss to explain why, in the first place, the growth should be confined so carefully, to the early years of life, and, in the second to adult life.

Facts of this character, added to such results as published, by Ehrlich and other investigators, on the gradual appearance of sarcoma, following a transplantation of carcinoma, seem to render untenable any of the usual theories regarding the etiology of new growths, as trauma, chronic inflammation, parasites, etc. In the search for an adequate theory for the origin of new growths, these opposing data seem to drive one to a study of the controlling forces of metabolism, where such features as chronic inflammation, trauma, parasites, embryonic inclusions, etc., are at best auxiliary or possibly incidental.

GROSS PATHOLOGY.

Of the 142 cases of Dr. Walker's report, 119 had some pathological description. Some of the points given are as follows:—The colon in 27 cases passed in front of the tumor; possibly in some instances this condition obtained and remained unreported. In those cases where the tumor was very large the intestine was flattened, and would have given no tympany. Adhesions to the surrounding structures were noted in 45 cases, that to the peritoneum being most common. Next in frequency come the stomach, liver, intestines, vena cava, pancreas and spleen. Thrombosis occurred in the vena cava in 5 cases, in the pulmonary vein in 2 cases. Erosion of the vertebra was present in 2 cases with pressure on the cord.

TUMOR: After removal the tumor varied from a typical kidney shape, to that of an oblong mass. Weight and size varied from a hazel nut, to 36 1-2, lbs, the average being 6 1-10 lbs. In one case the tumor was 22 lbs. while the remaining child was 35 lbs. The tumor as a point of diagnosis seems most important. In one set of 150 cases reported in *Trait de Medecine* it was absent in only three.

Chevalier, in 100 cases, found it absent in three. In Walker's set it formed the initial symptom in 45 or 31 per cent. and preceded all others by a period ranging from 2 days to 1 year, the average being 3 1-16 months. Generally the point of greatest prominence was over the umbilicus. On section the appearance varies considerably, usually the neoplasm when young is soft and greyish white, and this unfortunate resemblance to

the brain tissue, is no doubt the reason why so many of the earlier cases are classified as "Encephaloid Cancer" without any further gross or histological data. The older growths extend from a greyish red, to a dirty yellow. Muscle fibre and cartilage help to complicate the picture. Different degenerations take place, and increase the number of color shades. The consistency seems to vary from a fairly firm nodular mass, to one that is soft and almost diffuent. Thus the sensation obtained from palpation will vary in each case. Usually the kidney is subdivided more or less into lobules. In 22 of the cases (of Walker's 142) there was cyst formation varying in size from 1 c.c. to 500 c.c. and in contents, from a clear pale fluid, to a dirty brown debris. Absence of parenchyma and pelvis, is reported in the majority. The left kidney seems to be more frequently involved. In Jacobi's 40 cases the left was affected in 19, and both in 8 cases.

HISTOPATHOLOGY.

The cases reported, as I have mentioned, suffer from lack of accurate, and satisfactory detail, but it is from this standpoint of an histological examination that most are almost useless for statistical purposes. In the majority no microscopical report is given and in others a classification without detail.

The most accurately examined set that I have been able to find, is a surgical one of 74 by Walker, in the *Annals of Surgery*. These cases are divided into three sets;

1. 55 cases that died soon after operation, or showed subsequent recurrences. Of this number 19 are reported as round or mixed celled sarcomata *i.e.* 39.5 per cent.
2. 15 cases with an incomplete history of recovery. Of these 3 are round or mixed celled sarcomata, 20 per cent.
3. 4 cases reported as permanently cured, in none of which the round or mixed celled sarcomata are found, the diagnosis not being made in one case, and in the others rhabdomyosarcoma, alveolar sarcoma and adenosarcoma being given. From these results one can safely conclude that the purer forms of sarcomata are undoubtedly the most malignant. Also the percentage of this form is probably greater than usually reported, because many of those cases labelled as Cancer (very probably diagnosed as such from the gross) would prove themselves on section to be sarcomata.

Kelynack, in considering sarcomata from an histological standpoint makes the following classification of the primary

growths; 1. Round and spindle celled sarcomata; 2. Myosarcomata; 3. Lipo sarcomata; 4. Adenosarcoma; 5. Alveolar-sarcomata; 6. Lymphosarcomata.

In the round and spindle celled forms, the pictures depicted correspond fairly closely with that given in the case described; the growth is usually very vascular and often in the areas of the neoplasm remains of the renal parenchyema are to be seen. It is in this form that early metastases are likely to take place. In gross weight and size many of these tumors equal that obtained in the myosarcomata.

The myosarcomata.—Mixed with round or spindle cells are the elongated and striated muscle fibres, that are variable in size and distinctness of striation, the sarcolemma usually being absent.

These growths may reach enormous sizes, one reported by Paul, weighing 6 lbs, while the remaining child weighed 10 lbs. Secondary deposits are uncommon, although such have been reported. Jacobi says, "Mestastases, when they do occur, appear late in the course of the disease." This fact appears to be commonly recognised, but along with it the general opinion seems to state that this type is found more frequently than the other forms of sarcomata in very early years. This I do not think is sufficiently marked, if true at all, to be of clinical importance.

Regarding the alveolarsarcomata considerable difference of opinion seems to exist. That they may be confounded with the endotheliomata seems very likely, or possibly with the adenosarcomata, recognised and reported upon by Allen and Cherry as "large epithelial developments with distinct tubes or columns of epithelial cells, or masses of epitheloid cells arranged in sarcoma fashion, or even alveolar strictures resembling Carcinoma, but without sign of active spread."

The lympho-sarcomata are regarded by Kelynack as secondary growths, the primary most probably originating in the mesenteric or the retroperitoneal glands.

URANALYSIS.

The only condition that seems to be of importance is hematuria. In Walker's set it was present in 35 cases, and formed the initial symptom in 13.

Rohrer, in 115 cases, found it present in 37.

Dickinson and Ebstein, in 128 cases, report it in 81 and as the initial symptom in 48 or 31 per cent. Possibly it is present to a greater extent than these reports show, as no doubt it has

existed in some and has not been noticed. Palpitation may cause or will increase this condition of the urine. The color of the urine varied from a smoky tint, to a very dark red, usually it was of a uniform degree throughout, the first voided being similar to the last, which uniformity is a distinguishing feature of blood from the kidney. Microscopically the blood was found free, in fresh and in old clots. The passage of these clots is no doubt, one of the chief sources of pain so frequently found as an early symptom. Pus was found only where cystitis had set in.

Carr, of Washington, reports a case in which sufficient threads of the neoplasm were found to make a diagnosis.

Nowhere in the literature was I able to find any reference to segregation of the urine, or catheterization of the ureter, though in some cases this procedure should be possible. If either method could be adopted some important diagnostic information might be gained. In the present case the pelvis has been totally disorganized by the growth and the renal parenchyma, of which one can only be certain microscopically, does not seem capable of secretion.

If this be so, the absence of urine from the affected side, or even a marked drop in the amount will indicate almost complete disorganization of the kidney. Also those cases of hematuria when the blood is found free, and not in clots, will have much less renal involvement, and a fairly intact pelvis. Considering the fact that many renal growths are discovered by accident, and no definite time can be learnt of the onset, this may establish a point of considerable importance, as from it we may draw conclusions regarding the duration of the growth, and the possibility of metastases.

Again, when blood clots occur, they most probably result from hemorrhage into the new growth itself, and would indicate considerable involvement, the time of their occurrence depending upon the rapidity of the growth, and its malignancy.

Thus definite chronological relations between the various kinds of hematuria, and the palpation of the tumor, together with the gross and microscopic data, should be of considerable value.

FREQUENCY OF RENAL GROWTHS.

Primary renal growths as compared with secondary, are comparatively rare. And even secondary involvement of the kidney is uncommon.

Kelynack, out of a collection of 1400 cases, found 195

showing malignant disease, of which number 69 were sarcomata, and 126 carcinomata.

Of the 126 carcinomata the kidney was involved in 10 instances, 6 of this number being males, with an average age of 49, and 4 females with an average age of 48.

Of the 69 sarcomata 10 presented secondary growths of the kidney. With regard to the proportion of primary malignancy of the kidney, and malignant disease elsewhere, Kelynack states that it is between 2 or 3 per cent., though he regards this as possibly high, except in hospitals for sick children.

Morris, in an investigation of 2,610 post mortem inspections found 5 primary, and 2 secondary areas of malignant renal growth. In the last 151 autopsies at the Toronto General Hospital, there have been 3 cases of secondary renal involvement.

For the permission of reporting this case, I am indebted to Dr. Ogden Jones and Dr. H. A. Bruce, at whose kind suggestion I was allowed to perform the autopsy.

PYO-SEPTICEMIA.

BY W. S. ENGLAND, WINNIPEG, MAN.

From all appearances it would seem that a heavy duty devolves upon me, being the only member of the Canadian Medical Association present from the so called "Great West." I regret that a large number of our medical fraternity from that part could not have seen their way clear to cease the reaping of No. 1 "Manitoba Hard" for a brief time and enjoy a holiday, a pleasant journey, the meeting of numerous old friends, and the making of new ones, as well as to benefit by our thirty-eighth annual meeting.

I realize that it is entirely out of the question for me, even in a humble way to represent the great and rapidly advancing Canadian West, but I considered it my duty to at least be present at this meeting, and give my support to the welfare of our Association.

In presenting the case reports of three, to me very interesting cases of pyo-septicemia, which have recently occurred in my practice, I shall endeavor to be as brief as possible.

CASE 1. H. M. is that of a young man aged 32, height 5 feet 5 inches, weight 160 pounds; short, stout and inclined to be corpulent, occupation druggist. There is nothing noteworthy in the family history.

When ten years old he had an attack of typhoid fever, complicated by phlebitis of the right common iliac vein, the leg remaining at least one-third larger than the left in circumference since.

In 1901 he had two attacks of appendicitis and made a complete recovery after appendectomy. The patient is of a very nervous temperament and has suffered a great deal from indigestion. On inquiry I find that he has not been judicious as to his diet and mode of living. An aortic systolic murmur is present. Before retiring on the night of February 18th he partook of a supper consisting of cheese, biscuits, and a little whisky. The next day I was summoned and found him suffering from acute follicular tonsillitis, temperature 103 degrees F., pulse 102, headache and anorexia. The temperature gradually subsided under appropriate treatment, but in a few days the patient had an attack of bilious vomiting lasting twenty-four hours. These bilious attacks recurred about every five or six days for the next three or four weeks and at less frequent intervals later, notwithstanding the fact that he was kept on a rigorous milk diet; fever accompanied each of these attacks. February 28th patient complained of pain in the right ear with ringing and deafness, followed in a few days by tenderness over the mastoid. This was treated by hot boracic acid irrigations and instilling a 4 per cent. carbolic acid solution in glycerine into the ear, and the application of an ice bag over the mastoid. The ear trouble improved, and the pain practically ceased. March 1st the patient complained of pain in and tenderness over the wrist and shoulder joints. I may add that for all these "uric acid" manifestations salicylate of soda was administered with good effect. On March 6th a general erythematous eruption, probably septic, appeared all over the body, which persisted for two weeks. Dr. Prowse, an eye and ear specialist saw the case in consultation. On March 8th a bronchitis of the larger tubes developed with expectoration of a thick, blood-colored sputum, and the ear trouble returned with a temperature running up to 105 degrees F. The drum membrane ruptured this night, with great and immediate relief. Irrigations with a hot boracic solution and hot fomentations every hour, were applied. The sputum was submitted to Dr. Bell, our

bacteriologist, for examination, who reported that it contained a pure culture of the streptococcus. 2000 c.c. of antistreptococcic serum was given and repeated the next day, apparently with good effect. Strychnine was administered hypodermically. The patient complained of pain in the back, and on the 11th the urine was again examined and found to contain albumen casts and pus cells.

The temperature gradually came down to normal on the 13th of March, and remained so until the 17th. On this date he complained of pain in the left leg, and tenderness over the femoral vein, and the temperature rose to 99 degrees F. During the course of this phlebitis the temperature remained moderate, generally about 100 degrees F., until the 24th when it reached 103 degrees F.; but this gradually descended to the normal, which it reached on the 28th March. During the month of March the patient had severe attacks of dysentery, each lasting four days. During all this septic siege, in spite of a poor digestive system, and his inability to take much tonic treatment, the patient's general condition remained fairly good, his general state of nutrition kept up and he was hopeful.

On the 30th March, while using the urinal, he was suddenly seized with an acute and very pronounced priapism, which would not subside. The condition necessitated catheterization two or three times a day, and it was painful, as well as most distressing to the patient, for it remained chronic. Cold was at first applied, and later it was changed to hot applications. The temperature for the following three days ranged from 99 degrees to 100 degrees F. From April 2nd to the 9th chills were frequent and fever high and very septic, on three occasions reaching over 106 degrees F. This was probably the so-called "urethral fever." Antistreptococcic serum was again given on the 3rd and 6th but with no good effect, so far as I could perceive.

The patient's condition being very grave, I called in consultation a physician who makes medicine a specialty. After examining the case he said, on consulting: "Pyo-septicemia, no doubt, and I have nothing more to suggest in the way of treatment; but I don't like that heart murmur, malignant endocarditis. Bad prognosis." I replied: "But, Doctor, that murmur is ancient history; I discovered it ten years ago."

On April 10th patient complained of a wry neck, and again on the 13th went in for a general rheumatic inflammation of nearly all the joints of both arms and both legs, with an accompanying fever reaching as high as 103 degrees F. The

temperature gradually subsided, and became normal on the 19th. This condition of the joints was undoubtedly more or less septic, but gradually subsided under local antiphlogistics and salicylates. The swelling, tenderness and stiffness, remained in the left ankle joint for many weeks. Tonic treatment soon followed with as much forced feeding as possible.

A cold abscess developed at the site of the second injection of the serum some three weeks later, although every aseptic precaution was taken in its administration. In the course of a week the priapism gradually began to subside, and with it the breaking down of the bulbous portion of the corpus spongiosum, and extending forwards over an inch, anterior to the junction of the scrotum and penis, leaving a cavity in which blood, pus and urine accumulated under the skin. There was also a breaking down of the veins of the prostate. In passing a catheter at the junction of the movable and fixed urethra a foul-smelling serosaneous pus escaped, and pushing on, when the neck of the bladder was reached more of this came, then clear urine flowed. Owing to the destruction of the urethra catheterization was difficult and at times impossible. The urethra and bladder were frequently irrigated with boracic solution; urotropin was administered internally, also sedative for pain and sleeplessness.

From April 10th to the 18th a general septic condition with a temperature ranging from 99.1-2 to 103 degrees F. continued, but gradually subsided, and then remained practically normal for the next twenty-six days. On April 21st the patient sat up for the first time, and was out driving on the 30th. The abscess on the back was incised on May 7th, and on May 14th the patient was able to leave for the sea-side, where he remained a few weeks; but finding the atmosphere too irritating to his respiratory apparatus, he left for the Muskoka district, which agreed with him better. The patient returned July 31st looking the picture of health; he had regained his usual weight. While in bed the old swelling of the right leg had subsided, but it has reappeared. The patient has regained all the functions of the generative and urinary organs, although after urinating there is still a dribble, due to accumulation of urine in the old abscess sack, and precautionary treatment will be necessary to guard against strictures. The urine on last examination was reported normal, except for a few pus corpuscles.

CASE 2 is also of interest, although not presenting so many and varied complications as Case 1.

The patient, aged thirty-nine years, is a stout, thick-set, fleshy man, height five feet seven inches, weighing in health

about two hundred pounds, by occupation a hotel-keeper; popular with the public, and accustomed to stimulants, but never indulged to excess.

The beginning of his trouble dates from February 1st, 1905. While curling on the ice he became heated, and recalls rubbing the side of his nose with his mitten. An inflamed pimple soon appeared, which was followed within a few days by systemic disturbance. Two abscesses formed in his mouth, which were opened; septicemia followed, confining him to bed. His condition became gradually worse, and in March pain and tenderness were complained of in the right lumbar region; he also had chills and fever. He was taken to the Brandon Hospital, where he received constitutional treatment. Early in April he returned home, and soon after he was brought on a stretcher to Winnipeg for treatment.

April 12th, 1905. On examination I found the patient was weak and depressed; temperature 101 degrees F., pulse 102, appetite poor, bowels constipated. He complained of pain in the right hypochondriac and lumbar regions, and tenderness on pressure. The muscles in this region were rigid. Examination of the urine showed blood and pus cells, also a trace of albumen—no doubt due to pus. On April 13th, under ether anesthesia, I did a nephrotomy. Found the kidney substance very much congested and friable, with purulent infiltration. A rubber drainage tube was introduced. The hemorrhage, which was considerable, was checked by gauze packing. During the next day much blood appeared in the urine. Catheterization was necessary from this date till the 25th of April. The wound was dressed daily, and the packing gradually removed. To move the patient was like moving dead weight. He lay for weeks prone, listless, and helpless, speaking little, and only then in a low tone or a whisper.

A free purulent discharge soon flowed from the kidney substance, and later discharging sinuses appeared above, below, anterior, and posterior to the kidney. During the first three weeks after operation the temperature ranged from 99 2-5 to 102 2-5 degrees F., pulse from 106 to 120 per minute.

His general condition remained poor, and it was with difficulty that his nurses were able to induce him to take sufficient nourishment. He suffered from flatulency. The first four days after operation there was constipation, after which, until the end of the illness, there was a tendency to diarrhea. From May 9th to the 22nd. the patient was more restless, perspired freely at night time, and the temperature ranged from 100 2-5

to 105 degrees F., pulse 116 to 140, and respirations 20 to 44. Previously on several occasions large sloughs of kidney substance were removed at the dressings. He developed considerable cough, and at intervals it was accompanied by a copious thick mummular sputum. To relieve the bases of his lungs I instructed the nurses to keep the patient propped up on a bed-rest with pillows as much as possible (May 28th), also to change him from side to side occasionally.

On May 21st the superficial wound was again freely opened down to the kidney. This was followed by hot fomentations, which were changed every hour for the next ten days, and from that on every two or three hours until July 14th. From May 20th to June 6th the patient frequently voided urine involuntarily. Since the re-opening of the wound and the fomenting, the temperature has gradually subsided, generally ranging from 98 to 99 or 100 degrees F., on a few occasions reaching 101 degrees F. The general conditions also improved, the patient became brighter, slept better, was more easily handled, and began to take an interest in life; pulse improved in character, and ranged from 84 to 108; respirations 20 to 30 per minute; appetite improved.

He was taken out on the balcony on a stretcher, June 7th, and frequently from this date on. Since July 14th the patient has been able to help himself, and has been out in a wheel chair on the balcony daily, from morning to night, taking a sun bath. During this time two small abscesses developed in the scar tissue, which were opened and drained. The patient complained of much pain in the joints of the toes from June 4th to July 13th, which was much relieved by "green" Betgaoul-Ol. On July 25th the patient was in good spirits, and attended the exhibition, driving there in a cab, since which date he has been out driving nearly every day, and is at the present time convalescent; the discharge being small, and the wound nearly healed. A large quantity of urine was generally voided from the first of the illness, and the last examination of the urine which was made August 1st showed only a few pus cells. The treatment in this case, in brief, was supporting and stimulating from the first, together with tonics, "Blaud's capsules" and urotropin, also good nursing and massage. I may add that the pus from the lumbar wound on examination showed a short bacillus. Dr. Bell, who made the bacteriological examination, stated that on growing the organism on agar, the aroma which arose on raising the lid filled the atmosphere, and smelled like sweet violets.

CASE 3. F. A. F., male, aged 32. I was called in consultation to see this case. It was one of typhoid fever complicated with otitis media, on the 26th day of the illness. On the 52nd day of the illness boils and abscesses became manifest in all parts of the body and extremities; many of these developed, some superficially, and others deeper, requiring repeated incisions and drainage. The temperature ranged in the neighborhood of 102 degrees to 103 degrees F. during the attack of typhoid, and from then until the 62nd day of his illness it gradually came down to the normal; from the 62nd to the 70th day of the illness the temperature remained normal, and the abscess healing. The patient was very anemic, and debilitated, but his general condition is now rapidly improving. The organism found in the pus in this case was a staphylococcus.

To Summarize: In the first case a streptococcus, apparently one of great virulence and persistence, attacked the patient's body, in all parts, hardly an organ having escaped invasion. Nevertheless, in spite of poor digestive organs, by persistent treatment, and careful nursing, the organism was eliminated from his system, and in the end after a four months' struggle he made a good recovery.

CASE 2. Due to a short bacillus, is remarkable for many reasons; the profound poisoning, the duration of the sepsis for over six months, the fact that besides the two secondary abscesses in the mouth, the only other metastatic focus was located in the right kidney; also on account of the marked way the eliminating organs reacted, and began work soon after the operation, producing diarrhea, free perspiration, frequently polyuria, and at times a copious expectoration. This patient, too, with stimulating tonic, and supporting treatment, together with two special nurses, has battled and won.

CASE 3. Due to a staphylococcus was the mildest septic condition of the three. It is interesting to note, that this germ manifested itself superficially, principally in and under the skin. After withstanding the debilitating effects of a moderately severe attack of typhoid fever, he too has overcome the poison.

In conclusion, Mr. President and Gentlemen, I wish to thank you for having so patiently listened to me, also to thank you for having last year elected me Vice-President of this Association for the Province of Manitoba.

POST-OPERATIVE HEMATEMESIS.

BY E. RALPH HOOPER, M.D., TORONTO, ONT.

Though it may not improve our credit to repeat unfortunate histories, they are, however, none the less instructive and useful. The case I am referring to is one of tragic interest. Four features stand out with conspicuous prominence in this case.

The first is the simplicity of the exciting causes. The second is the brevity of the illness. The third the obscurity of the underlying cause. The fourth is the deplorable termination.

Mrs. R., aged 28, was well nourished and of florid complexion, and presented the appearance of health. On the morning of December 25th, the patient complained of pain in the right iliac fossa, of moderate severity. This was followed by nausea and vomiting. At 12 o'clock that night when I saw the patient pain was still present. There was rigidity of the right rectus muscle, and a mass could be readily distinguished, with its centre over McBurney's point. There was no departure of temperature or pulse rate from normal standard. The patient was treated after the suggestion of Ochsner, and received nothing by the mouth, except lemon albumen.

From the 25th to 29th there was a gradual but decided improvement in local condition, and on the morning of the operation the mass formerly present in the right iliac fossa could scarcely be detected.

The operation itself was simple in every detail. The appendix was readily found, quickly removed, and with no disturbance or exposure of other viscera.

The condition of appendix was one of congestion, with prominence of the larger vessels and injection of the smaller ones.

The anesthetic administered was equal parts by weight of chloroform and ether.

The condition of the patient from 10 o'clock till 2.30 p.m. was uneventful. The nurse at that time noticed a marked weakness of the radial pulsation, and met it with a hypodermic of strychnia. The patient was nauseated, and vomited some mucus. In as far as the voice is an index of strength, it may be inferred that the patient was profoundly depressed, as at five o'clock she spoke only with great effort, and with marked

feebleness. With the exception of the vomiting, the pulse rate and weak articulation, nothing unusual presented till Sunday morning. The vomiting and nausea were as follows:

Friday the 29th, 3 p.m., 6 p.m., 8 p.m., and 11.30.

Saturday, 31st, early morning, vomited four times, the quantity being three quarts of a dark brown fluid, with a fine coffee ground sediment. This was identified as partially digested blood.

Urinary System.—The urine was free from albumin, and normal in quantity till 6 o'clock of the 30th, when seven ounces only were passed. In spite of efforts it was impossible to obtain any more, even for analytical purposes. Complete suppression of urine had supervened.

Circulation.—As has been mentioned, the pulse rate throughout had been unusually rapid and feeble. On Sunday morning a remarkable inconsistency in the arterial pulsation was noticed. Though the radial pulse was scarcely perceptible, the abdominal aorta and femoral vessels had a vigor and violence of circulation that were startling. The rise was forcible, imparting to the palpating fingers a blow which was sudden in origin and decline. The volume immediately faded away.

Dr. Osler called this condition pistol shot pulsation. A haemic murmur was readily distinguishable over the sternum and precordial area. Mental condition throughout was dull and apathetic, due, possibly, to the marked weakness. The answers to questions were intelligent, but the interest, though aroused with little difficulty, was not sustained. On Sunday morning, from 9 a.m., unconsciousness was present, and it was impossible to arouse the patient by questions or ordinary stimuli. The pupils were moderately contracted, and reflexes were totally abolished. It seemed at this time to give the patient pain to raise the arms, and they yielded to attempts to move them by a measured response. The arm, for example, was brought to a position of extension by a series of jerks. The limb was rigid, and relaxed only by degrees.

At 1 o'clock Dr. Osler, who was in the hospital at the time, kindly consented to see the patient, and rendered most helpful counsel and removed the perplexity as to the cause of the condition, by the diagnosis of post operative hematemesis; at that time the prognosis was regarded as favorable.

The importance of the hemorrhage was doubtless underestimated by me, as the patient at no time appeared to be exsanguinated. The countenance was ruddy and suffused, and the surface of the body warm; and I still find it difficult to reconcile it with the severe loss of blood.

The temperature was practically normal till 8 o'clock Sunday morning, when it gradually rose to 103.2-5 at 4 o'clock, when patient died.

The abdomen was not distended, and the wound presented the appearance of perfect health, and all agreed that the abdomen furnished no evidence of trouble from the operation area.

The mortality is high, being 72.5 per cent., in series of eleven cases, and 69 per cent. in a series of twenty-nine cases.

The Nature of Hemorrhage is usually of blackish-brown fluid, with the coffee ground of digested blood. Occasionally the clotted blood may be vomited.

Duration of Hemorrhage may be at frequent intervals, extending from fifteen to twenty hours. In many cases the bilious vomiting diminishes before the hematemesis occurs, which is usually within forty-eight hours.

General Condition is that of collapse, and asthenia into which the patient rapidly enters. The condition is many times an obvious toxemia from a recognizable cause.

Pulse is rapid, irregular, accompanied by pallor, faintness, coldness of extremities. In some restlessness and mental acuteness, marked by anxious though momentary interest.

Etiology.—(1) The administration of the anesthetic has been suggested, but it has occurred with such infrequency that this can scarcely be regarded as more than a contributing cause. Moreover, the same occurrence has followed cocaine anesthesia.

Laparotomy.—(2) It was felt that the site of the operation would afford an explanation, but reports show that hematemesis following operations on the abdomen, more frequently than any other class of operations, has also followed those on bladder—lithotomy and lithopaxy.

Vomiting.—(3) The strain from vomiting has been urged, but here again we find cases in which vomiting was slight, or even absent. In some cases it is true an ecchymosis of gastric mucosa may be produced, and an old ulcer caused to perforate a vessel.

(4) Fasting before operation can only be regarded as a predisposing cause.

(5) A fifth cause assigned is injury to stomach or duodenum by surgical handling.

(6) Von Eiselsburg has suggested that thromboses of the omental vessels after injury or ligature, followed by embolism in the wall of stomach and formation of ulcers.

(7) Sepsis has been held responsible for the duodenal ulcers

following burns. With this consideration, Rodman has sought to place the responsibility upon septicemia, which he knew produced hematemesis in four cases of appendicitis.

(8) Mayo Robson believes that this condition depends on a nervous reflex influence, and points out the absence of peritonitis and tympanites. The prognosis depends on the septic factors present. If the septic reaction is marked with presence of temperature and discharge, the outlook is more hopeful. On the other hand, should the infection be masked or subdued with subnormal temperature and rapid pulse, and rapidly increasing vital depression, the prognosis is grave.

Treatment is that of septicemia; gastric lavage, with normal saline or 2 per cent. soda solution, followed by agnos 1-1000. Collapse needs venous injection strychnia hypodermically, rectal feeding, calomel, ice to epigastrium, suprarenalin, etc.

MEDICAL THOUGHTS DURING LEISURE HOURS.

BY JAMES S. SPRAGUE, M.D., STIRLING, ONT.,

Author of "Medical Ethics," etc.

"Read not to criticize, but to accept, or reject, or to consider."—*Bacon*.

Da, pater, Augurium, atque animis illabare nostris (Aenidos Lib. III.)

Holy Father, glide into our minds and give us a prophetic sign.

Of the dead, one must speak with charity, respect and reverence, and especially do I while narrating an incident connected with the practice of Dr. Frank Buller, a fellow graduate, Victoria, 1869, who, for thirty-seven years was my friend indeed. Some ten or more years since, two of the wealthiest men of Renfrew, went to Montreal to consult him. "Mr. A.," Buller said, "in what business are you engaged?" and the reply was, "I am a merchant," and when the operation was finished, and the question asked in regard to the fee, the reply of the doctor was: "One hundred dollars." Mr. B's. turn for operation was then commenced, and to the question of the doctor: "What is your occupation?" Mr. B. replied: "I work in a mill," and

the necessary operative work being finished, and the question as regards the fee was given, to it Dr. Buller replied, "Since you work in a mill, Mr. B., my fee is \$5; for saw mill work is hard work." It may be mentioned that Mr. B. is one of the millionaire lumbermen and mill owners in his county, and his friend Mr. A., although very wealthy, counts the *ones*, while he counts *hundreds*. Although the oldest and dearest of friends, it has been said that A. and B. did not take the same seat in the homeward bound train, and the old friendship has been slightly soured; however the moral remains: "Do not wear diamonds and good clothes when visiting the specialist." The plainest of clothes and dress are necessary. "Working in a store" and plain clothes would have saved Mr. A. more than enough to buy his wife a hat, the fertile cause of much envy and jealousy in any Christian neighborhood.

Not long since, while walking with a confrere, down one of the principal streets of ———, he exclaimed, "Say, old fellow, I just saw something that put *wonder* to blush"—and retracing our steps he showed me a door plate with "Dr. Wunderr, Dentist." on it. A few days after this, while similarly strolling down a street I suddenly stopped him and said: "If this is not the biggest piece of brass associated with modesty I ever saw, then I am mistaken." I satisfied him, by directing his attention to an 18x36 brass plate, on which was plain J. Walsingham Smith, Dentist." It is needless to state we gazed for thirty full minutes at this evidence of modesty and wondered why the "Dr." was left off. We, at our hotel, saw in the "Daily Star and Beacon" his advertisement, and there was no "Dr." in it, nor was there "Honor Graduate of ——— University." These thoughts were pleasant—and indeed "pain-less"—and we simultaneously said, "why."

Recently while on a few days' visit to the dear old home in the Bay of Quinté District many old stories and pleasing incidents were recalled and needless to state, they had grown much in incredulity, and promise well before another year to reach a level of unbelief if not of serious doubt. It is reasonable to believe that I brought with me from my visit several new pleasant sketches from the homes of the U. E. Loyalists, and one is reported, and in memory, in which my old friend Dr. Oronhyatika (*by the way, he and I were born not far distant from each other.*) The story is as follows: A certain Mr. M., a descendant of one of the oldest Prince Edward County families, in whose great grandsire there is said to have been much Mohawk blood, was, a few years ago, present at one of the

big gatherings in the vicinity of Deseronto, at Foresters' Island inaugurated by our dear doctor, and much credit he commands for his fraternal work. Mr. M. is a prominent man and wished an introduction to the doctor. Such being obtained, he said to the High Chief Ranger: "By the way, doctor, I claim some Mohawk blood," at which the doctor smiled, and going closer to him he gently stroked those parts of the spinal vertebræ in the vicinity of the Ligamentum Nuchæ. Withdrawing his fingers and employing his characteristic smile, the doctor, smelling his own fingers, said to Mr. B. "Dear friend and brother, I detect no Mohawk, but there is a peculiar odor, and such is remarkably 'Nigger,' yes, 'Nigger,' surely." This is named as but a fragmentary and pleasing incident, and illustrative too, of the many instances wherein the chief Forester had a ready answer.

It is truly encouraging to the conservative doctor to read the following few lines of the address of my very learned and very dear friend, Dr. Hugh A. McCallum, London. The address, "A Clinical Lecture on Visceroptoses; its Symptoms and Treatment," was delivered, Feb. 18, 1905, at St. Michael's Hospital, London.

The encouraging words are: "In the last five years the female pelvis has been passing over from surgery to medicine. Indeed, it is not too much to say that the vast majority of operations for displacements and prolapse are both unscientific and unnecessary." Verified, indeed, are these decidedly expressed sentences in the estimation of careful and keen observers who are adherents of the prominence of medicine and are unbelievers in the slaughter of the innocents.

Never is surgery so beautiful and brilliant, says Lafranc, as when obtaining a cure without the destruction of any organ; without plunging the bistoury into quivering flesh, and without causing the effusion of blood.

The venerable Erichsen in "Finality in Surgery" (see London *Lancet*, October 4th, 1873, p. 489) in prophetic words reminds and warns us: But there must be a final limit to development of manipulative surgery. The knife can not always have fresh fields for conquest and, although methods of practice may be modified or varied, and even improved to some extent, it must be within a certain limit.

That this limit has nearly, if not quite, been reached, will appear evident if we reflect upon the great achievements of modern surgery. Very little remains for the boldest to devise or the most dexterous to perform. Those among us whose years are numbered by two sidereal revolutions of Saturn fully

agree with this master mind in surgery, and are fully realizing the truths of his prescience, and are encouraged to believe that medicine will come into possession of her rights, as the skies are clearing, evidently to all observable. In making somewhat of a daily study of synteresis and alexipharmics, not for one day only, but for two decades (not forgetting the price lists of drug houses), it is my belief, and soon repeated, that Hygeia will come into her own eventually; but not until many riddles are solved, will preventive medicine receive the crowning glory.

(To be continued)

THE AMERICAN TUBERCULOSIS EXHIBITION.

Under the auspices of the National Association for the Study and Prevention of Tuberculosis, and of the Committee on the Prevention of Tuberculosis, of the Charity Organizations of New York, the American Tuberculosis Exhibition was organized, and the first exhibit was held in the Museum of Natural History, in November 1905.

The object of the Exhibition was to show the methods that are being adopted throughout America and Europe to prevent and cure consumption, and by a practical object lesson, to arouse and interest the public and medical profession to concerted effort in preventing this white plague, and to awaken the conscience of the public to recognise the individual's responsibility.

The Exhibition was extremely varied and instructive to the Society, sociologists, and the medical profession. There were in all upwards of ninety exhibits by different Boards of Health, Sanatoria, Hospitals, Dispensaries, and Educational Associations, averaging more than 5000 square feet of wall space. Besides charts, and photographs, there were many models of appliances and buildings illustrating easy and cheap methods of treating tuberculosis patients in their homes. Moreover, a series of lectures was given, while the Exhibition was open, by various prominent sociologists, labor organisers and physicians, which were attended by appreciative and varied audiences.

The remarkable success of the exhibition was proved by the immediate and urgent request to have the Exhibiton re-

peated in various cities throughout the United States. During the past seven months seven cities have been visited, with an attendance of upwards of 200,000 persons. That interest has grown in this instructive exhibition is shown by the fact that while in New York only 17,000 persons visited it during the fortnight, in Milwaukee, where it has recently been, 54,000 people visited it during a like period. Reports show that wherever the exhibition has been there has been an enthusiastic interest aroused, and practical results in the campaign against tuberculosis have followed.

The National Sanitarium Association of Canada, has arranged to bring the exhibit to Toronto in August for a fortnight, beginning with the opening of the meeting of the British Medical Association. It is hoped thus that more than a local interest will be elicited, and the professional men through the Dominion, and laymen throughout the province, will take the opportunity of visiting this great object lesson on what is at present being done to prevent and cure tuberculosis.

The following were a few of the striking features shown at the New York exhibition, the greater number of which will be exhibited in Toronto:

In the exhibit of the New York City Department of Health, were included photographs and charts, illustrating in detail methods of reporting, recording, following up and treating tuberculous cases; maps of wards in New York city, showing grouping of houses in which cases of tuberculosis have been reported; illustrations and explanations of methods employed at the out-patient clinic of the Department.

The New York Tenement House Commission presented illustrations of the appalling conditions under which the New York poor live, making plain the hopelessness of the tuberculosis problem until the public conscience has awakened, and insisted that such things shall not be. They showed a model of a typical dark room in a tenement house, one of 360,000 of its kind in New York city. The only source of light and ventilation, is a window in a court, which is separated from this room by three other rooms. The interior is dreadful in squalor, and filth. The onlooker is only partly reassured by the statement that the articles he sees before him have been sterilized. In pleasing contrast, is a model of the same room after the visiting nurse has taken charge. Light has been admitted by cutting a window, and cleanness, neatness and comfort have replaced the conditions of misery. The commission showed also various models in plaster and papier-mache of tenement houses both typical and

ideal. One model of a block illustrates a type of building in which 4,000 persons have lived at one time.

The Committee on the Prevention of Tuberculosis (New York City) sent interesting charts illustrating the incidence of tuberculosis, and resulting mortality in different races, and nationalities under various social conditions, and at different periods of life.

The Maryland State Board of Health, and the Tuberculosis Commission of Maryland, showed a most instructive group of graphic illustrations of various sociological statistics both general and local.

The Chicago Department of Health, exhibited large charts of wards with reported cases of tuberculosis plotted thereon by different colored pin heads, the different colors representing different years.

Various associations in cities and larger towns formed to be both educational and practically helpful, exemplified their methods of organization, and the work that had been accomplished. As examples may be mentioned the Maryland Association for the prevention and relief of tuberculosis; The Cambridge Anti-tuberculosis Association, and the Boston Association for the Relief and Control of Tuberculosis.

The practical methods of the Visiting Nurses' Association of Cleveland, Boston, Baltimore and Chicago, were suggestive of how much might be done in every town that has the least interest in the detail of tuberculosis clinics.

The exhibition of the special dispensaries for tuberculous out-patients of the New York Department of Health, the Vanderbilt Clinic, the Presbyterian, the Gouverneur and New York Post Graduate Hospitals, and of the Henry Phipps Institute in both Philadelphia and Baltimore, were very helpful to those interested in the detail of tuberculosis clinics.

Some twenty-four Sanatoria and Hospitals were represented by photographs, charts graphically illustrating results, charts showing climatic conditions of various localities, also tables with details of cost of maintenance, various illustrations of clinical forms in use, and other matters of interest. In most cases there were also models illustrating simple and effective housing of patients living the out-of-door life. All the well-known institutions from the Atlantic to the Pacific were represented.

Of particular interest was the exhibit of Clinton Prison, at Dannemora, New York, showing what can be done in a large institution to control tuberculosis.

The Sea Breeze Hospital for children attracted much attention. It is the only institution of the kind in America.

The French and German exhibits were late in arriving, and only a few were in position when the exhibit closed. Maps of both countries showed the geographical position of the various sanatoria. Illustrative charts of the objects of and work done at several French tuberculosis dispensaries were shown, and there were some particularly interesting tables of the diets of various classes of working men, the actual being compared with the ideal, relative expenses also compared. Tables also illustrated the relative value of different articles of food.

Of especial popular interest were the laboratory exhibits. The Henry Phipps Institute showed admirable gross specimens, prepared by the Kaiserling method, illustrating tuberculosis in various organs at different stages. The New York College of Physicians and Surgeons, exhibited along similar lines. The Saranac Laboratory exhibit of Tubercle Bacilli from Koch's first culture and also of human, bovine, avian and piscine forms and the various products obtained from the tubercle bacillus was, as always, interesting. A collection of various acid-fast bacilli, showing the resemblance of the various relations of the tubercle bacillus, was shown by the Natural History Museum.

Practical object lessons illustrating the dissemination of disease were not wanting; culture plates illustrating dissemination of micro-organisms from sputum, by coughing, by sneezing, and by the agency of flies; a cotton filter which had been placed in the air shaft of an apartment house; and a collection of filthy pencils and chewing gum used by school children.

Enough has probably been said to illustrate the broad character of the exhibition. The various exhibits were placed under the headings of their respective states, and any point of interest could be readily found. Throughout the day and evening explanatory tours were conducted by various interested persons both lay and professional. Visitors were from all classes of the community, and the exhibit was not least appreciated by those who had personal experience of dreadful local conditions.

Canada was represented only by the National Sanitarium Association, and the Toronto Free Hospital for Consumptives. In the Toronto Exhibition it would be desirable to have some illustrations of the work done elsewhere in Canada up to the present time. There are various institutions and organizations which might well be represented.

The Toronto exhibition will be held in some building centrally situated but not yet determined upon. A program of addresses which should prove instructive and interesting is being arranged for every second evening of the fortnight. Stereopticon views will be given every evening, and there will be specially conducted tours for the purpose of explaining various features of the exhibit. Physicians are urged to attend and to draw the attention of the public to the exhibition.

Individuals or associations who would in any way care to assist will have their inquiries promptly answered and all information furnished by addressing, J. S. Robertson Secretary National Sanitarium Association, 28 Adelaide St. West, Toronto, Canada.

Already such inquiries are commencing to reach the Secretary, one to-day being from an official of the Women's Institutes, members of which desire to attend some of the meetings.

(Signed) CHARLES D. PARFITT, M.D., M.R.C.S., L.R.C.P.,
Muskoka Free Hospital for Consumptives,
Gravenhurst, Ont.

**BRITISH MEDICAL ASSOCIATION, TORONTO, ONT.,
AUGUST 21-25, 1906.**

For above occasion the following fares and conditions are authorized:

1. *Delegates from Canada, United States and Mexico.*—Lowest one-way first-class fare for the round trip on certificate plan from all points in E. C. P. Association territory. Passengers going by rail, returning Richelieu and Ontario Navigation Co., or *vice versa*, rate to be one and one-half rail fare. Certificates to be valid and fee of 25 cents charged, (tendered connecting lines and associations.)

2. *Extension of Time Limit.*—On deposit with Joint Agent of properly validated standard convention certificates or return portions of round trip tickets on or before August 28th, 1906, and on payment of \$1.00 at time of deposit, an extension of time until September 30th, 1906, will be granted.

3. *Delegates from Outside of Canada, United States and Mexico.*—(a.) On presentation of certificate of forms, signed

by G. H. Webster, Secretary E. C. P. Association, and countersigned by F. N. G. Starr, Secretary of the Canadian Committee, or Guy Elliston, Secretary of the British Medical Association, one-way tickets to be sold between all points in Canada, at one-half lowest one-way first-class fare, round trip tickets at lowest one-way first-class fare, *Except* as per Clause *b*.

(*b.*) *To North Pacific Coast Points and Return.*—Agents at Montreal and Toronto only, to sell round trip tickets to North Pacific Coast points, viz: Vancouver, Victoria and Westminster, B.C.; Bellingham, Everett, Seattle and Tacoma, Wash., and Portland, Ore., as follows: Going and returning via direct routes, usual diverse routes to apply, at through round trip rate made by adding lowest one-way first-class fare to Chicago to \$62.50 tendered therefrom.

(*c.*) *To Los Angeles and San Francisco and Return.*—Agents at Montreal and Toronto only, to sell round trip tickets to Los Angeles and San Francisco, Cal., and return as follows: Going and returning via direct routes through Chicago, usual diverse routes to apply, at through round trip rate made by adding lowest one-way first-class fare to Chicago to \$62.50 tendered therefrom. Going via direct routes, returning through North Pacific Coast Points, viz.: Vancouver, Victoria or Westminster, B.C., Bellingham, Everett, Seattle or Tacoma, Wash., or Portland, Ore., or *vice versa* at through round trip rate made by adding lowest one-way first-class fare to Chicago to \$75.00 tendered therefrom.

4. *Dates of Sale for Side Trip Tickets for Delegates from Points Outside Canada, United States and Mexico.*—July 1st, to September 30th, 1906, inclusive, *Except* that dates of sale to North Pacific Coast and California points will be July 1st to September 7th, 1906, inclusive, with going transit limit of September 20th, 1906.

5. *Return Limit for Side Trip Tickets for Delegates from Points Outside Canada, United States and Mexico.*—September 30th, 1906

6. *Side Trips from Toronto.*—Side trip tickets will be sold from Toronto only, to Delegates from the Maritime Provinces, from points west of Port Arthur, and from the United States and Mexico, on presentation of properly validated convention certificates, return portions or round trip tickets, or deposit receipt (*if extension of time is availed of as per paragraph 2*), at lowest one-way first-class fare for the round trip to all points in Canada, *Except* that fares to North Pacific Coast points are

to be made by adding lowest one-way first-class fare to Chicago to \$62.50 tendered therefrom. Tickets may also be sold to North Pacific Coast points in the United States and to Los Angeles and San Francisco, Cal., and return, on basis of fares shown in paragraph 3, clauses *b* and *c*.

Side Trips for Ontario and Quebec Delegates.—Side trip tickets will be sold from Toronto only, to Delegates from Ontario and Quebec to all points in Canada west of and including Sudbury and east of and including Montreal, Que., at lowest one-way first-class fare for the round trip; *Except* that in ticketing to North Pacific Coast points in Canada, fares and routes as shown in paragraph 3, clauses *b* and *c*, will apply. Tickets may also be sold to Ontario and Quebec Delegates to North Pacific Coast points in the United States and to Los Angeles and San Francisco, Cal., and return fares and routes as shown in paragraph 3, clauses *b* and *c*. Tickets as per this clause will be sold only on presentation of properly validated convention certificate, or deposit receipt (if extension of time is availed of as per paragraph 2), or, in the case of Toronto local physicians, on presentation of certificate of form, signed by G. H. Webster, Secretary, E. C. P. Assn., and F. N. G. Starr, Secretary of the Canadian Committee, British Medical Association.

7. *Dates of Sale and Limits for Side Trips from Toronto for Delegates from Canada, the United States and Mexico.*—Thursday, August, 23rd, to Saturday, September 1st, 1906, inclusive. Tickets to North Pacific Coast and California points to bear going transit limit of September 20th, 1906. Final return limit September 30th, 1906.

8. *Validation of Return Portions of Tickets to North Pacific Coast and California.*—Return portions of tickets to North Pacific Coast and California points must be validated by Joint Agent at destination, for which a validation fee of fifty-cents will be charged.

9. *Stop-overs on Side Trip Tickets.*—Side trip tickets to all points in Canada will permit stop-overs at any intermediate point going and returning within the final limit, *Except* that on side trip tickets to North Pacific Coast and California points, stop-overs will be allowed on going trip within going transit limit of September 20th, 1906. On return trip from North Pacific and California points, stop-overs will be allowed within final limit on deposit of ticket with Agent at stop-over point immediately upon arrival, *Except* that tickets reading for return via Canadian Pacific, Great Northern or Northern Pacific will not require to be deposited.

10. *Additional Amounts Required via Steamer Lines.*—On several steamer lines extra charge will be made for meals, berths, etc. The following arbitraries have been advised:

Canadian Pacific Railway Upper Lake Steamships.—Going lake, returning same, \$8.50 additional to be collected. Going lake returning rail, or going rail, returning lake, \$4.25 additional to be collected.

Richelieu & Ontario Navigation Co., St. Lawrence Route.—Delegates holding return portions of round trip tickets reading all rail to Toronto may return via steamer on presentation of ticket to purser and payment of following amounts, viz.: \$6.50, Toronto to Montreal; \$3.50, Kingston to Montreal.

Northern Navigation Co.—One-way meal and berth arbitraries. From Collingwood or Owen Sound: to Sault Ste. Marie, \$5.00, Mackinac, \$7.00, Petoskey, \$8.50, Killarney, \$2.00, Parry Sound 75c. From Sarnia: to Sault Ste. Marie, \$3.50, Port Arthur and Fort William, \$8.50, Duluth, \$11.00.

Algoma Central and Hudson Bay S. S. Line.—Meals and berth arbitraries. From Southampton, Kincardine, Goderich and Sarnia to Sault Ste. Marie and Manitoulin points, one way, \$4.00; round trip, \$8.00.

11. *Joint Agency at Toronto.*—Joint Agency at Toronto will be located at Room 101, Union Station, and will be conducted in the name of G. H. Webster, from August 21st to September 24th, 1906. Office hours, 9.00 a.m. to 6.00 p.m.

Clinical Department.

The Management of Occipito-Posterior Positions. By ARTHUR H. BILL, M.D., of Cleveland, State House-Surgeon of the New York Lying-In Hospital, in *The Cleveland Medical Journal*.

There is perhaps no one thing in obstetrics which is more annoying to the physician than a persistent occipito-posterior position, so that in general discussion of obstetrical problems, one of the first questions asked, as a rule, is "How do you handle posterior positions?"

In this short paper I shall not attempt to discuss the various methods employed for preventing these positions and for correcting them when already present, previous to the onset of labor and during labor before the rupture of the membranes—I mean such methods as postural treatment, external and combined manipulation, etc.—but I shall confine myself to those occurrences of posterior position which, in the course of labor, form such an obstacle that it becomes necessary to resort to operative interference for the accomplishment of the delivery. It is in these cases that there is such a marked difference of opinion and uncertainty as to the safest and best method of procedure, and on account of this uncertainty there is usually a tendency to let the case take its own course and only interfere, often too late, when this is an absolute necessity in order to save the life of the mother or child.

Of the more important methods the following may be mentioned: (1) The internal procedure known as podalic version, which, however, only comes into consideration in cases in which the head is unengaged, and in these cases there is in all probability a contraction of the pelvic inlet, which would in itself entirely govern the method of procedure, and perhaps form a contraindication to the version. Then, too, the version is often impossible on account of the extreme degree of contraction of the uterus. For these reasons it would seem that the cases in which podalic version could be performed, for the correction of the faulty position alone, are rare indeed. (2) The various methods of delivering with the aid of forceps. Of these may be mentioned:

(a) That in which no attempt whatever is made to rotate the head to an occipito-anterior position. Here the forceps are applied in the axis of the pelvis and irrespective of the head, and are kept in this position grasping the head obliquely, unless spontaneous rotation occurs, which, however, is usually not the case, for the forceps when applied in this position form in them-

selves an additional obstacle to the rotation. If the head fails to rotate, which is usually the case, it is delivered in the posterior position. In connection with this method, it is noteworthy that in the clinics in which it is in vogue, namely, in Germany and Austria, the number of lacerations of the perineum and of episiotomies is exceedingly large, as is natural to suppose when a head is delivered with the occiput to the rear.

(b) Another method used considerably in this country, as well as in certain foreign clinics, consists in applying the forceps in the same way as in the previous method, namely, with regard to the pelvis, and in attempting to rotate the head at the same time as the traction is made. Here it is evident that forceps applied obliquely to the head, that is to one of its longer diameters, are in no position to act well as rotators, for, when the attempt is made, they frequently slip around the head instead of turning it, and thus causes injuries to it, and, furthermore, the wider separation of the blades is conducive to lacerations of the maternal soft parts.

(c) A third method is the one first described by Scanzoni, of Prague, in his text-book of obstetrics and commonly known as the Scanzoni manœuvre. This manœuvre, which was strongly opposed in Germany, as well as in Prague and other parts of Austria, was taken up and developed by the French, especially in the Tarnier and Baudelocque Clinics in Paris. It consists of two distinct applications of the forceps. First, they are applied directly to the sides of the head with the concavity of their pelvic curve anterior, as if to an anterior position. Thus the pelvic curve of the forceps looks toward the face instead of toward the occiput as in anterior positions. Then, with a large swinging movement of the handles, so as to keep the blades of the forceps in the pelvic axis, the head is rotated until the occiput is anterior. This part of the manœuvre is a rotation pure and simple without simultaneous traction. When the occiput is anterior, the forceps are naturally inverted and must be removed and reapplied, as to a head in a normal anterior position, in order to complete the delivery. After the rotation is completed and before removing the inverted forceps it is well to draw the head down slightly to fix it more firmly in its new position and thus prevent a return to its former posterior position.

In this country, this manœuvre has been recommended chiefly and almost exclusively by Williams, of Baltimore, nearly all of the other American writers on obstetrics failing to mention it at all, and condemning attempts at rotation in general as dangerous and usually impossible. Edgar has experimented with a modifi-

cation of this manœuvre, in which he applies the forceps in an inverted position, that is with the concavity of their pelvic curve to the rear and looking toward the occiput, and then rotates and delivers without a second application, but this original application is so difficult and confusing as to be impracticable, except in those cases in which the sagittal suture is nearly transverse, the occiput being only slightly posterior.

The various methods of increasing the flexion of the head serve a useful purpose in cases in which this is possible, but inasmuch as the purpose of this paper is to consider only those cases in which immediate delivery is indicated, I shall not consider them in detail. Other methods of performing rotation, such as the use of the vectis, of one blade of the forceps, etc., I shall not describe.

In view of the slowness with which the Scanzoni manœuvre, which I have found to be an excellent one, and to give far the best results of any so far described, is being adopted in this country, it would seem that any good results obtained from its use would be worth reporting, and so I wish to mention several cases in which I used it while connected with the New York Lying-In Hospital.

The first case is that of Mrs. K., a primipara, who had been in labor 36 hours before admission to the hospital. The membranes had ruptured eight hours previously. The uterus was dry and firmly contracted. On abdominal palpation the fetal head could be felt above the brim of the pelvis, and could not be forced into it. The fetal heart sounds were heard to the right of and below the umbilicus, rate 110 per minute. The external measurements of the pelvis were:

Between the iliac spines	23 cm.
Between the iliac crests	27 cm.
Right oblique diameter.....	21 cm.
Left oblique diameter.....	20.5 cm.
External conjugate diameter.....	18.5 cm.

Internal examination showed the head to be above the brim in the R.O.P. position. The membranes were ruptured and there was a well marked caput succedaneum present. The diagonal conjugate measured 10 cm., from which the true conjugate was estimated as 8.25 cm. Anterior rotation with the hand was impossible, and the Tarnier axis traction forceps were applied to the head in the occipito-posterior position, the application being made with reference to the pelvis and grasping the head over the mastoid and temporal regions. The head was then

drawn down into the pelvis with some difficulty, and when entirely through the cervix, the axis traction forceps were removed and the solid blade forceps applied directly to the sides of the head and the latter rotated and delivered by Scanzoni's manœuvre. The child weighed 3,400 grams. There was a slight laceration of the perineum which was started by the high forceps. No difficulty was encountered in performing the rotation.

The second case is that of Mrs. M., fourth pregnancy, who had been in labor 28 hours. The membranes had ruptured six hours previously. An unsuccessful attempt had been made by the physician in charge of the case to deliver the child with forceps before the patient was brought to the hospital. When seen at the hospital, the uterus was thoroughly contracted. The head was above the brim in the R.O.P. position. The os was large enough to admit the whole hand. The external measurements of the pelvis were:

Between the iliac spines	24 cm.
Between the iliac crests	26 cm.
Right oblique diameter.....	21.5 cm.
Left oblique diameter	21.5 cm.
External conjugate diameter.....	19.5 cm.

The diagonal conjugate measured 10.5 cm., from which the true conjugate was estimated at 8.5 c.m., there being a simple flat pelvis of moderate degree. Here as in the previous case it was impossible to rotate the head with the hand on account of the firm contraction of the uterus, and a version was out of the question for the same reason, and so the Tarnier forceps were applied to the head in the R.O.P. position and the latter drawn into the pelvis, although still in the R.O.P. position, as I made no attempt to rotate the head while it was within the cervix. The Tarnier forceps were then removed and the solid blade forceps applied to the sides of the head, the latter rotated, the forceps reapplied to the head in its anterior position and delivery completed. The child weighed 4,000 grams. There was no laceration of the maternal soft parts.

CASE 3.—Yetta S., second pregnancy. The position was R.O.P., giving rise to prolonged and difficult labor. Operative interference was resorted to in the interest of the child, the fetal heart having fallen in rate to 90 per minute. In this case the head was engaged and the largest diameter had passed the pelvic brim, but was well within the cervix, which was dilated to about the size of four fingers. The cervix was dilated manually to full

dilatation and the solid blade forceps applied to the sides of the head, that is, in the oblique diameter of the pelvis. Here again I made no attempt at rotation until the head had been drawn entirely through the cervix, and then the Scanzoni manœuvre was carried out without much difficulty, and without injury to the maternal soft parts. I think that the importance of avoiding all attempts at rotation within the cervix is self-evident, on account of the danger of rupturing the lower uterine segment, for the cervix grasped the head very firmly.

CASE 4.—Catherine G., second pregnancy. The position of the head was R.O.P., the sagittal suture being in the oblique diameter of the pelvis. The case was almost a parallel of the preceding one, and the indication for forceps was the same, and I shall not take your time in giving the details. No difficulty was met with in rotating the head after it had been drawn through the cervix. There was no injury to the mother or child.

CASE 5.—Bessie H., first pregnancy. The position of the head was L.O.P., the occiput being just posterior to the transverse diameter of the pelvis. There was absolutely no progress in the labor, and forceps were resorted to in the interest of the mother. The head was entirely out of the cervix and just at the spines of the ischia. In this case, as would be expected, the application of the forceps to the sides of the head was somewhat more difficult on account of the nearly transverse position, and no doubt was greatly facilitated by the use of the solid blade forceps, of which I have spoken. The forceps used as rotators in all these cases were those known as the Tucker-McLane solid blade forceps. They have a peculiar advantage in these cases over the fenestrated forceps in that they have a perfectly smooth surface and are somewhat thinner and narrower, allowing them to slip around the vaginal wall without difficulty and without danger of damaging it. This greatly facilitates the manœuvre both in making the original application and in rotating the head after the application. In the present case the forceps were applied with the concavity toward the occiput, and after rotation a second application was unnecessary. This was almost as easy as the reverse application would have been, since the sagittal suture was almost in the transverse diameter. There was no laceration of the soft parts.

CASE 6.—Nellie C., first pregnancy. The case was one of protracted and difficult labor. The operation was performed in the interest of the child. The position was L.O.P., the head being in the pelvis and entirely through the cervix. The pelvis was normal, with the exception of a very prominent spine of the

ischium on the right side, which projected about 3 cm. into the pelvic cavity. This spine had caused an obstruction to the further descent and had promoted anterior rotation of the sinciput. Fortunately the other side of the pelvis was of normal size and by forcibly flexing the head and forcing it to the left side it was possible to rotate the occiput to the front and deliver it in this position. Here as in the preceding cases, the forceps were applied directly to the sides of the head. In this case especially it would seem that rotation with any other application would have been absolutely impossible on account of the small space in which to work.

CASES 7 and 8.—The next two cases I have put together and they are very similar. Both were primiparæ. The occiput in each case was directly in the hollow of the sacrum and the head was at the pelvic outlet. In these cases the application of the forceps was as easy as in a completely rotated anterior position. It would have been comparatively easy to deliver the head in the posterior position, but on account of the greater chance of saving the perineum, the head was rotated through an angle of 180 deg., bringing the occiput to the front, after which the forceps were reapplied and the delivery completed without a laceration of the perineum in either case.

To hurriedly sum up these cases, it will be seen that they furnish examples of occipito-posterior position in all the various planes of the pelvis; at the brim and complicated by a moderate contraction of the pelvic inlet, engaged but within the cervix, in the true pelvis, but above the spines, and at the pelvic outlet. In all of these cases practically the same manœuvre was carried out to accomplish the rotation, and in each case it was successful. In the last two cases, in which the occiput was in the hollow of the sacrum, it is barely possible that in time there would have been a spontaneous though difficult delivery. Of course the occiput would have been to the rear, and as the heads were both large, the delivery would probably have been accompanied by a laceration of the perineum, which was avoided in both cases by bringing the occiput to the front, even though it was necessary to rotate the head through an angle of 180 deg.

In view of the good results accompanying this procedure, it would seem to be a perfectly justifiable and advisable one in all such cases, to prevent the unfavorable delivery in the posterior position. It is an operation which naturally appeals to one, since it converts the abnormal into the normal position.

In regard to the effect upon the child, no bad results were noticed in any of these cases, and it would seem that, from a con-

sideration of the safety of the child, the rotation of the head may be said to be a perfectly safe procedure. After experimenting with this manœuvre, and after trying it thoroughly in the Tarnier clinic in Paris, Budin and Demelin have concluded that there is no danger whatever to the child even in those cases, which are rare, in which the shoulders do not follow the head in its rotation, and even though the head be rotated through an angle of 180 deg.

I have reported this short series of occipito-posterior cases in view of the fact that this method of treatment is not generally adopted, and by many held to be impracticable and usually impossible. It would certainly seem that failures were due more often to the method of performing the manœuvre than to a faulty principle. It is an operation in which all the details should be closely followed, and in closing I wish to mention a few points which are essential to its success and safety.

(1) The blades should be applied accurately to the sides of the head, and not simply with regard to the pelvis. This is more easily accomplished, especially in the oblique and nearly transverse positions, by means of the solid blade forceps.

(2) The head should be held firmly in the grasp of the forceps during the rotation to prevent slipping and a possible consequent injury to it.

(3) In cases in which the sagittal suture is in the oblique diameter of the pelvis it is absolutely necessary to draw the handles of the forceps well over to the thigh opposite the occiput before rotating.

(4) In performing the rotation, the blades of the forceps should be kept as nearly as possible in the axis of the pelvis by a large swinging movement of the handles, which thus describe a large circle externally. If the last two rules be strictly adhered to, it will be found that the pelvic curve of the forceps will offer no obstacle whatever to the rotation, and furnish no disadvantages when compared with perfectly straight forceps, the use of which has been suggested.

(5) No attempt at rotation should be made while the head is within the cervix, as it is a dangerous procedure, liable to be followed by a rupture of the lower uterine segment. In cases in which the head is high up and partially within the cervix it is far better to draw it entirely out of the cervix first of all, and to perform the rotation lower down in the pelvis.

(6) If there is a tendency for the head to return to its posterior position immediately after removing the forceps for the reapplication, this may usually be overcome by drawing it down

somewhat after complete rotation and before removing the blades. In more obstinate cases the head may be held with the fingers of one hand applied along its side during the removal and reapplication of the forceps, or simply one blade of the forceps may be removed and reapplied before the removal of the other, and thus one blade is kept constantly in a position to prevent a return to the posterior position. This latter procedure is, however, rarely necessary.

If these essential points are carefully followed, the operator will meet with success in practically all posterior cases, and be able to avoid lacerations of the maternal soft parts which would in all probability occur if the head were delivered in the occipito-posterior position.

A wedge of hard wood makes a gag quite useful, often, when administering anesthesia. A discarded thermometer case (or a hard rubber douche point) is a serviceable handle in which to mount, with candle grease or adhesive plaster, a stick of silver nitrate. Steel spring tape-measures are better than the wires generally sold for the purpose, for conducting to an X-ray tube the current from the coil or static machine; easily kept taut, and quickly adjusted, they are safest for the patient and most convenient for the operator; that they are not insulated is inconsequential—the coverings on the regular wires do not insulate the induced current. Cheap powder blowers, such as are used for insecticides, may be employed as insufflators in surgical work, and pepper boxes are useful for dusting powders.

If a small child has been pulled by the arm and thereafter has disability in that member, attention should first be directed to the upper end of the radius. Here one is apt to find a subluxation of the head of the bone ("pulled arm") or an epiphysial separation.

In a tuberculous patient with supposed chronic appendicitis it is well to suspect tuberculous disease of the ileo-cecal valve.—*American Journal of Surgery.*

Physician's Library.

A distinction of no mean degree has been conferred upon an American book, the joint authorship of Drs. J. Madison Taylor and William H. Wells. The revised second edition of their treatise on "Diseases of Children," published by P. Blakiston's Son & Co., of Philadelphia, has been translated into Italian by DR. MARIO FLAMINI, of the Pediatric Clinic of Rome, with contributions by Prof. Concetti and Dr. Valabussa. The translation has proven very popular abroad, and the occasion is one of felicitation, not only to the authors but to American medicine generally, inasmuch as the work was chosen as being especially adapted to clinical teaching in Italy. Few American books have attained such honor. Its success abroad is but a repetition of the favor which it enjoys here.

Surgical Suggestions. Practical Brevities in Surgical Diagnosis and Treatment. By WALTER M. BRICKNER, M.D., Chief of Surgical Department, Mount Sinai Hospital Dispensary, New York; Editor, *American Journal of Surgery*, and ELI MOSCOWITZ, M.D., Assistant Physician, Mount Sinai Hospital Dispensary, New York; Editorial Associate, *American Journal of Surgery*. Duodecimo; 60 pages. New York: Surgery Publishing Co., 1906. Cloth, 50 cents.

This little book is most novel, not only on account of the many original, terse and epigrammatic practical suggestions given, but its general appearance and attractive form. It contains 250 suggestions grouped under proper headings and its contents are carefully indexed. While some of the items are familiar to the practical surgeon, they are presented in a manner that will impress them on the reader's memory. The book is bound in heavy cloth, stamped in gold, and the text is printed upon India tint paper with marginal headings in red. This book will be much appreciated by the general practitioner, not alone on account of the value of its contents, but as an artistic bit of book making.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only \$2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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President—R. W. POWELL, M.D., Ottawa.

Vice-President—J. O. CAMARIND, M.D., Sherbrooke.

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Dominion Medical Monthly

And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVII.

TORONTO, AUGUST, 1906.

No. 2.

COMMENT FROM MONTH TO MONTH.

Do not forget the date of your own national medical organization, the Canadian Medical Association, at 2 p.m., Monday, August 20th, at the new Science Building, College Street, Toronto, at the head of McCaul Street. This meeting is very important as plans for complete re-organization will be presented by the Special Committee appointed last meeting at Halifax. At no time before in the history of the medical profession has there been manifest such earnest desire to cohere, and to work for all that is good, both for the profession and otherwise than at the present time. For the time being, the meeting of the British Medical Association may overshadow the meeting of our own association in importance; it will of course, in point of scientific work. That is granted. We should not, however, forget that we owe a great deal to ourselves, and that we are CANADIANS; and that we have problems to work out which demand careful and thoughtful consideration, from diffuse sources. So it is that it is most important that this meeting should be representative, that every province should have a large contingent present so that all may be heard on the vital question before us at the present time—re-organization.

There will be held also in the same place at 8 p.m. the annual meeting of the Ontario Medical Association. This is an organization which has done a great deal of good in the past and, under its present management, Dr. George A. Bingham, President, and Dr. Chas. P. Lusk, as secretary, ought to receive the cordial support which it deserves. True, it is provincial in its scope, but our Ontario readers have a live, and enduring interest in its aims and objects. It is quite the right and proper thing that every province should have its own provincial society, and we can be loyal to it as we can be to the national organization. Indeed, every county or group of counties in the different provinces of the Dominion of Canada should have their societies, and they should be properly conducted and well organized and attended. The time has long since gone past when the medical man can be content with remaining in his own shell; he must come out and fraternize. We bespeak, therefore, for the annual meeting of the Ontario Medical Association, a full attendance.

But there is still another medical society which will hold its annual meeting here in August; and it is a society which ought to receive most cordial support from the medical profession, namely, the Canadian Medical Protective Association. We doubt if there is existing in Canada to day an organization of medical men of more solid importance to the Canadian medical profession, if every single, individual member would only see it in this light, than the Canadian Medical Protective Association. It will meet on the adjournment of the first session of the Canadian Medical Association, in the same place, *i.e.* probably about 5 p.m., Monday, the 20th of August. We understand that since the report of the President, Dr. R. W. Powell, Ottawa, last year at Halifax, the intervening twelve months have been exceptionally prosperous and hopeful. Among other things we understand that there has been an increased membership; that no cases have gone wrong; that there is at present only one case pending, a trivial one in the Province of British Columbia; that all bills are settled; that there have been no large legal expenses during the past year; and that the association is in a very comfortable position financially. This speaks a great deal for the wise and business-like administration of the President, Dr. Powell, and he is to be congratulated upon it. Need we add anything further? It seems folly that all are not banded thuswise together.

Whilst we laud our own, we are not undmindful of those who are coming. The Toronto profession have worked very laboriously and faithfully to make the meeting here of the British Medical Association a pronounced success.

We are of course all interested in the scientific part of this meeting, and the indications are that its attendance is going to surpass anything ever held in Canada; indeed, it will probably rival the best meetings of the American Medical Association. We are told that from England and other parts of the Empire they are coming by hundreds; that Canadians will turn out as they never have, even to their own national medical meetings; that the United States profession will fairly swarm over us. The more the merrier; so we are going to have a bumper house. As Torontonians we are proud of our city; the medical men will compare here with any the world over. They certainly will do their level best to fulfil what is expected of them, and will hope that all are seen after properly.

The hay-fever season is upon us and many are looking for palliatives for this distressing malady. Solomon Solis-Cohen, in the Journal of the American Medical Association, July 28th, 1906, states his observations during an experience of several years past in the treatment of this condition. In the treatment of this condition, and the treatment is far more palliative than curative, three substances or preparations are new before the profession, namely: Adrenalin chloride solution of Takamine; suprarenalin; pollantin. Speaking of the first, and this we have found very useful in the treatment of hay fever, Dr. Cohen says it is not eligible for lingual administration, *i.e.*, the effect produced by the amount you could safely place for dissolution on the tongue would not be effective, but must be administered by instillation into the conjunctival sac, or into the nasal passages. Speaking of suprarenalin, Dr. Cohen finds it advisable to use a snuff more frequently of suprarenalin, as follows: Suprarenalin, one part; bismuth subcarbonate, three hundred parts; zinc oxide, three hundred parts; zinc stearate (Comp.) two hundred parts. These are to be mixed and well triturated. This powder may be either snuffed or insufflated. Of course there are many other substances, as boric acid, etc., which may be used as diluents. In from thirty to fifty per cent. of the cases met with, Solis-Cohen states that pollantin produces positive effects, although he has found it nothing more than a palliative. With the above suprarenalin powder relief is obtained lasting from two to ten hours, according to the environment.

Science Notes.

Is There any Cure for Color-Blindness?

The question came up recently, according to the *Central Zeitung für Optik und Mechanik*, if the use of rosalin-colored glasses sometimes recommended was a certain cure for, or help in, the case of that class of color-blindness in which red and green cannot be distinguished from one another. This question is answered in the periodical named, by Herr Pichon, of Cologne, in the negative, but with some reservations.

Color-blindness is inborn; and it is impossible by means of glasses of any special color or kind to implant in a color-blind person that sensitiveness to color with which Nature has not endowed him. The fault lies with certain fibers in the retina. There is, however, a means by which even the perfectly color-blind can be enabled to recognize and distinguish every color, and even every shade of every color—without, however, being able to distinguish the colors as can a normal eye. This help is based on that principle of any colored glass, by which it permits most easily the passage of those rays which correspond to its own color; and tends to arrest all rays of the complementary color. Those who are color-blind red and green cannot normally distinguish between these colors, both of which appear to them yellowish or bluish. If, however, one afflicted with this species of color-blindness looks at both red and green objects through a red glass, he will at once note a difference in the two colors, in that the red appears unweakened in brightness. In other words, red objects will appear to him lighter, while green rays will be absorbed by the red glass and hence green objects seen through it will appear to him darker than when seen with the naked eye. As a complement to this, the red-green color-blind person will by the use of green glasses see objects that are really green brighter than with the naked eye, while red objects seen by him through the same green glass will appear to be darker than when viewed with the naked eye alone.

If we ask one who is color-blind to red and green what color certain well-known red and green objects have—as for instance the foliage of an ordinary cherry tree and the cherries thereon—he will answer correctly, because he has heard from others what the colors of these objects are. But if we give a red-green color-blind person either red or green glasses, he can by

their aid tell what color he observes, by the degree in which the glass affects the brightness of that which he sees.

In the same way one who is color-blind to yellow and blue can be helped to distinguish these colors, by means of either yellow or blue glasses, although otherwise undistinguishable. Through the yellow glass, yellow objects will appear brighter than with the naked eye alone; and conversely, the use of a blue glass will brighten to him all really blue objects and dull the brightness of all that are yellow.

As regards those who are color-blind to all colors, they are to be helped by a set of three different glasses—red, green and violet. If one who is color-blind to red and green wishes to be able to distinguish between the various shades either of red or of green, the proper course is for him to supply himself with a set of three or more glasses, mounted in the manner of the lenses in a pocket microscope. If in looking through these at a red or a green object he notices no difference in brightness, no matter through which of the glasses he observes it, then he must look again through two of the glasses at once—side by side—until he does observe a difference.

In case a totally color-blind man wishes to distinguish slightly differing shades of color, he must make combinations of red and green, yellow and orange glasses, and with these combinations he can distinguish twelve different shades. In this case it will be best to have the glasses set in pairs, each of the above-named combinations in a frame by itself. Of course these helps are of no use for railway men, or those whose duty it is to observe the colors of signals at sea; as in their case the use of such appliances is not admissible. In conclusion it may be remarked that there is a special kind of color-blindness caused by a disease of the retina, and which results in the inability to distinguish blue at all, and one of the optic nerve, which results in total inability to see red.—*Scientific American*.

News Items.

ESTERHAZY, Sask., has fifteen cases of smallpox.

SMALLPOX has broken out in Dawn, Kent County, Ontario.

THE deaths in St. John, N.B., January to July 1st numbered 374.

DR. JOS. W. CHISHOLM was drowned in Big Glace Bay, C. B., July the 23rd.

THERE were 74 more typhoid fever deaths in Ontario in June, 1906, than in June, 1905.

DR. BERWICK, of Grand Valley, has been appointed associate coroner of Dufferin county.

DR. C. D. SECORD, of Harrietsville, leaves for Edmonton this week, where he intends to locate.

DR. A. T. STEELE, of Shelburne, has been elected president of the Central Dufferin Telephone Co.

DR. J. W. SLAVIN, one of the oldest and most respected citizens in Orillia, is dead at the age of 71 years.

DR. F. MONTIZAMBERT, Ottawa, Director-General Public Health, is inspecting in the Maritime Provinces.

DR. LABERGE, of Montreal, the civic health officer, is strongly urging the establishment of a Federal Health Department.

DR. W. A. HUTTON, formerly house surgeon in the General Hospital at Winnipeg, perished in the disaster in Vancouver Harbor a short time ago.

DR. ROBERT has returned to Delhi, Ont., from New York City, and commences the practice of medicine in the office formerly occupied by Dr Wells.

DR. J. M. GORDON has sold out his practice at Ripley. The Doctor's health has not been good for some time, and he has gone to Gravenhurst to recuperate.

DR. C. J. FAGAN, Secretary of the British Columbia Board of Health, reports the salmon canneries in that province sanitary, and packing conducted in a cleanly manner.

DR. W. K. COLBECK has sold his medical practice in Grand Valley to Dr. Chas. Gaviller. Dr. Colbeck intends to spend some time in the hospitals of New York and Baltimore.

DR. ALLAN MCINTOSH, of 120 Huron Street, Toronto, died recently as the result of an overdose of morphia. He had been suffering from insomnia for over a year, brought on from overwork while living at Bear Creek, Minnesota, where he went after graduating from Trinity Medical College.

DR. J. P. KENNEDY has met with successful results in his efforts to establish a hospital in Wingham, and we understand that the amount necessary has been nearly all secured, and the prospects are that before many days the entire amount required for purchase of the building and fitting up in first class style, will have been provided by leading citizens.

The death is announced at Traverse City, Mich., of Dr. Albert H. Holliday, a graduate of Toronto University, and subsequently of Victoria Medical College, Cobourg, where he received the degree of M.D., C.M. At the time of his death he was president of the local medical association. Deceased, who was 47 years of age, was a native of Brooklin, Ont. He is survived by a widow and three children.

THE Thirty-ninth annual meeting of the Canadian Medical Association, will be held in Toronto on the afternoon of the 20th August, and the forenoon of the 21st. The meetings which will be of an executive character will be held in the New Science Building on College St., at the head of McCaul St. The first session will convene at 2 o'clock p.m. in the north lecture room. The chief item of business will be the reception of the report of the Special Committee on Re-organization, and for this alone there should be a large and representative attendance.

DR. J. ALEX. HUTCHISON, Montreal, Chief Medical Officer for the Grand Trunk Pacific, has been on a tour of inspection, 160 miles driving west of Winnipeg.

DR. F. G. FINLEY, Montreal, was severely injured in a street railway accident recently. He is in the Montreal General Hospital, and we are glad to announce that good hopes are entertained for his recovery.

DR. A. W. KEANE, late resident house physician and surgeon to the Toronto General Hospital, and a recent graduate of the College of Physicians and Surgeons of Ontario, has returned to Essex, and has opened up an office there.

SAD indeed was the death of Dr. D. George J. Campbell, of Halifax, who fell a victim to pneumonia on his wedding tour. He died on the 19th of July, and was the only son of Dr. D. A. Campbell, of Halifax. Dr. Geo. M. Campbell, of Halifax, was his uncle. Delegates to the Canadian Medical Association last year will remember his extreme desire that their entertainment in Halifax should be of the first order.

WE regret to have to announce the death of Dr. J. J. Elliott, Toronto. Dr. Elliott, who was in his 31st year, was a graduate of Trinity Medical College 1896, and of the Toronto General Hospital, the following year. He was devoted to his practice, unassuming and of a kindly jovial nature. His early demise is extremely sad after but ten years' service in his chosen profession. Carcinoma of the stomach is said to have been the cause of death.

THE Samaritan Hospital for women at Montreal is now installed in its new building, 394 Dorchester street west, which was recently purchased for it by one of its wealthy friends. By the will of the late Miss Orkney, it will receive a bequest of over \$6,000. The Hospital has now room for thirty beds, of which seven are free, and the others semi-private and private. All the private rooms are open to any physician of Montreal in good standing for gynecological cases only, including abdominal surgery. According to its charter medical students are not admitted, but medical graduates are always made welcome to visit it.

Correspondence.

REFORMATION OF INEBRIATES.

To the Editor of DOMINION MEDICAL MONTHLY.

Sir.—The Ontario Society for the reformation of inebriates desires space for calling the attention of the benevolent public to its work and to its needs. Its object is the reclaiming of inebriates. Its methods are as follows: Home treatment is given in suitable cases and such cases as require hospital care are treated from one to three weeks in hospital. A friendly visitor, called a probation officer, takes the supervision of inebriates subsequent to treatment, finds them employment, and endeavors to bring them into touch with the church of their choice. The medical officer of the society administers the treatment, and associated with him is a consulting committee of three leading physicians of Toronto. Arrangements have been made with the police authorities whereby persons arrested for drunkenness (when not hardened offenders) may be committed to the care of the society instead of being sent to jail, and forced to associate with the vicious and the depraved. The medical treatment is conducted on strictly ethical lines, no secret remedies being used, and it is continued for three weeks, while the probation on parole is continued for several months. The scheme is a unique economic measure, which for the class referred to renders prolonged detention in an institution unnecessary. It is combining maximum efficiency with minimum expense. We wish to put this unique economic system to a crucial test on a sufficiently ample scale, to be used as an object lesson, before the next meeting of the Ontario Legislature. The result, we do not doubt, would be eminently satisfactory, and would more than justify legislation along the same lines. An eminent Oxford professor, and a Canadian, in a letter to the secretary of this society, speaks of the proposed legislation as follows: "I think the plan you propose is an excellent one, and I do hope it will be carried out."

At the last quarterly meeting of this society the report of the officers was most gratifying, inasmuch as 60 per cent. of the cases of inebriates treated and cared for were doing remarkably well. In view of the satisfactory character of the report it was

decided to make an appeal to the benevolent public for financial help to carry on the work efficiently, and as an object lesson before the next session of the Ontario Legislature. Remittances may be made to the treasurer, Confederation Life Building, or to the secretary, 76 Prince Arthur Avenue, Toronto.

E. J. BARWICK, M.D.,
Chairman of Medical Consulting Committee.

A. M. ROSEBRUGH, M.D.,
Secretary.

S. C. BIGGS, K. C.,
Treasurer.

Toronto, July 10, 1906.

Publishers' Department

HOT WEATHER DIET.—In hot weather the average person takes too much food and particularly an excess of meat. The digestive organs are kept at hard labor assimilating a heavy diet and forcing every organ in the body to do an unnecessary amount of work. The digestive apparatus faithfully performs its function until insulted nature rebels and enforces a period of rest for the exhausted organs. Another danger from eating too much meat in summer is that of ptomain poisoning following the ingestion of tainted meats. During the hot months the question of diet is largely one of the class of food material best adapted to sustain mental and physical energy without unduly increasing the production of heat. A diet of milk, eggs, fruit and EGG-O-SEE is most suitable for the summer months. EGG-O-SEE with cold cream makes a delightful basis for every meal as it offers the full food value of whole-wheat. The EGG-O-SEE Cereal Co., of Quincy, Ill., will send on request a full size package of EGG-O-SEE to any physician.

PROTECTION FOR SURGEONS.—Not life insurance, but health assurance. In the operating room, the office, the lecture amphitheatre, the buggy, the street, day or night, rain or shine, summer heat or winter cold, you owe it to yourself to have your "immediate environment," with regard to temperature and humidity, as equable as possible. To this end wear the Dr. Deimel Linen-Mesh Underwear

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVII. TORONTO, SEPTEMBER, 1906.

No. 3.

Original Articles.

PRESIDENT'S ADDRESS.*

By GEO. DREW, M.D., NEW WESTMINSTER, B.C.

Gentlemen,—I feel impelled by keen sense of obligation to at once thank you for the unexpected and unwarranted honor conferred upon me by your choice of president for this annual period and meeting of our provincial association.

My next duty, much more pleasant and agreeable, is, on behalf of the medical profession of this city, and personally, to extend to the membership of the association and visiting brethren, especially those from south of the 49th imaginary line, a most hearty and fraternal greeting and welcome to this, the seventh meeting of the British Columbia Medical Association, and also to express the hope that our associations and deliberations may result in mutual pleasure and profit.

Upon reference to the by-laws of the British Columbia Association, I observe certain duties are imposed upon the president. From one of his duties there is no escape, for it is imperatively there set forth in this absolutely positive language: "He shall deliver an address, setting forth the condition of the profession in the province," etc. Having read this authoritative command, "He shall deliver an address," etc., the weight of official responsibility seemed almost crushing; yet duty's call adds stimulus and sometimes assists the weak and timid to surmount mountains of difficulty. To set forth the condition of the profession in or throughout the province is a heavy undertaking, and I hope impeachment for neglect

*Delivered at annual meeting of British Columbia Medical Association, August 1st and 2nd, 1906.

of trust may not follow my efforts to discharge the traditional and customary duty of the official chair.

Though our city is not hoary with legends or traditions, nor our archives musty with the accumulated historical records of consecutive centuries (for many citizens who may jostle you upon our thoroughfares to-day were pioneers and helped to clear the virgin forest even where we now are gathered), yet New Westminster will ever remain and pass down in history as having been the first capital of British Columbia, and, though shorn of that glory, nature's legacy of picturesque and superior commercial location upon the gentle slope of Fraser's northern banks will ever remain with her, and at future gatherings of the medical association of the Sunset Province of our fair Dominion I hope the memories of all here assembled may revert in pleasant recollection to this first meeting in the Royal City.

As corroborative evidence of our city's claim of having been the capital, it is interesting to observe that the first act passed in British Columbia respecting the practice of medicine was passed here, and is entitled, "An Ordinance Respecting Practitioners of Medicine and Surgery." It is dated as having passed the Legislative Council upon April 1, 1867, and assented to in Her Majesty's name upon April 2, 1867, by Frederick Seymour, Governor, at New Westminster, B.C. The Act is a short one, and the preamble is not by any means the least important clause. It runs: "Whereas it is expedient that persons requiring medical aid should be enabled to distinguish qualified from unqualified persons, therefore be it enacted." This clause shows clearly that the idea in the minds of the early legislators of this province, when they passed our first medical act was that it was more for the protection of the public from incompetent practitioners than such a law was necessary, as is so often stated at the present day, to create the members of our profession into a closed corporation. I am indebted to one of our former presidents, Dr. R. E. Walker, of New Westminster, for this item of history, and if any persons feel sufficiently interested to look more carefully into the legislative history of the profession, I would refer them to his presidential address of August 29, 1902, in which this feature of our history is very elaborately recorded.

The Royal Columbian Hospital, founded in 1859, now located in our suburb (Sapperton) was the first hospital established upon the mainland of British Columbia, there having been a marine hospital at Victoria prior to 1859.

It may not be unprofitable to briefly review the history of the association, especially as the city in which we are now assembled was intimately associated with the conception and

birth of our officially organized institution. We are just now seven years old, and, though the silver streaks of advancing years are showing upon the heads, and the contemporary lines of care upon the features of many present, I sincerely hope not one of us has yet lost the retrospective interest attached to and associated with the arrival of the annual birthday period.

During the year 1899 a series of meetings of the Vancouver and the New Westminster medical societies was held to discuss the question of the formation of a provincial medical association. On January 18, 1900, the Victoria Medical Society invited delegates from Vancouver, New Westminster and Nanaimo to a dinner, at which the desirability of such an association was unanimously recognized. The next day a meeting was held in the Parliament buildings, in the rooms of the Hon. the President of the Council, at which Hon. Dr. McKechnie, of Nanaimo; Drs. Helmcken, Fagan and Fraser, Victoria; Dr. Walker, of New Westminster, and Drs. Weld and Pearson, of Vancouver, were present. The British Columbia Medical Association was inaugurated, officers were elected, and in August of the same year the first meeting took place in Vancouver.

The dangers besetting the infantile and childhood period of medical societies in general are more or less familiar to the profession, and the vicissitudes and precarious existence of our British Columbia societies may even yet be within the memory of some present. Without further irksome and wearying recital of historical data, we may congratulate the association upon its having passed the most dangerous period of life, survived many critical experiences, and that now it might be regarded as almost able "to run alone." Many of us seem to consider such an organization really able to run itself, but we only require a moment's serious thought to realize that it needs support. United effort and allegiance to the true principles of our ancient and noble profession will instil such vitality that the objects and purposes of the association will become more apparent to each member, and real benefit be bestowed upon the profession and general public.

So much of sterling value, in information, suggestion and precept is contained within the small compass of the constitution, by-laws and code of ethics of the British Columbia Medical Association, that I now take the liberty to suggest that steps be taken to place a copy in the possession of every member of the profession in the province, and I earnestly hope careful perusal of the modest pamphlet may be granted.

This train of thought has temporarily drawn me beyond

the swift current of scientific advance and surgical evolution into an eddy of retrospective reverie, offering passage by a deep and steady channel of present attainments to a limitless ocean of unfathomed depths.

So much are we engrossed at these periodical gatherings with scientific discussion that it appears to me not unwise if we devote a little time and thought to the ethical aspect of our profession.

As no distinctions of race or nationality are recognized by us, so in our ministrations to the public during the discharge of professional duties, we stand upon an isolated plane and require to be most careful that we retain in the public eye the respect and confidence bequeathed by our predecessors. Having lived and labored under some of the old, and now superseded, methods of practice, and in older Canada, the difference of the attitude of the public towards us as a profession, compared with that of years ago, is very apparent. As custodians of the public and private health, we should deserve and command a greater degree of public confidence than I fear is bestowed upon us. Why such relations? There may be some cause of fault with the public. We may at times think them hypercritical; yet we all recognize that honest criticism is beneficial and stimulative towards better and more perfected effort. Since it is "our duty to the public" that is under consideration, I shall not attempt to deal with "the duty of the public to us," but will endeavor to make a few observations which I trust may arouse sufficient thoughtful interest in our professional musings from which possible benefit may accrue.

That many causes exist with us whereby this loss of professional prestige has become so general I am convinced all present will admit. As to how numerous the causes are which have produced such effects and the remedy to be applied or counteracting course adopted, I really think it impossible, in the short time at my disposal, and also inadvisable to undertake the enumeration of, or suggest remedies. Every man is conscious of individual defects of character, temperament, disposition and qualification or fitness for the position he may be called upon to fill. The medical profession offers no easy grade nor substitutional discharge of duty whereby such natural discounting defects might be counterbalanced in some other profession, trade or calling, for the physician must personally attend to duties, no proxy often being worth considering. Hence, upon his individual fitness and possession of those inherent qualities (educational training being granted), tact, good judgment, knowledge of human nature, etc., which go toward making a good physician, de-

pende his success. This personal attention which the profession calls for, both in relation to patient and public, soon tests the physician's capability for inspiring confidence or otherwise. Professional misfits may account in some degree for the attitude of the public under consideration, but there are other causes, many of slow growth, therefore more deeply rooted.

Lack of unity and firm adherence to duty, principle and honor, upon questions of moral and professional character to-day constitute the worm at the root and are undermining the foundations of professional prestige. This is a broad, far-reaching statement, comprising sub-divisions which may embrace every branch of professional ethics, and, if properly applied, should constitute each one his own confessor. The object desired when these thoughts were engendered will, I hope, be more likely of attainment by leaving this delicate subject with us in its suggestive character, trusting that we will give to it the daily prominence which it deserves.

The public expects, and justly so, the physician to be qualified for any task. This thought might lead us towards the sub-divisions of general medicine and surgery into special fields, and very properly so, for we all soon recognize how broad and yet how limited is our knowledge. The specialist should be more capable of giving to the public the very best his field can produce. We, as physicians, recognize the advantage of special study and application and should not hesitate to advise our patients accordingly.

Our educational standard needs to be maintained, hence the professional qualification demanded by the provincial act, over which the medical council has supervision.

That the profession has done noble service and placed the public in a position of comparative safety when contagious or communicable diseases are considered, every citizen will admit.

We are all so familiar with the inestimable benefits which have during recent years been conferred upon humanity by bacteriological discovery and demonstration that I will not impose upon your patient indulgence by attempting to enlarge upon this subject. Were these remarks addressed to the public, the benefits accruing to them from discoveries pertaining to hygiene, purity of food, milk and water supply, etc., could be dilated upon, but this would form a subject worthy in itself of separate presentation, and beyond present intentions.

Though purposely avoiding special mention of the diseases which, through scientific investigation, have been prominently brought to public and professional notice, I cannot refrain from asking your serious consideration of the move-

ment and interest aroused by the universal efforts to combat the ravages of "the white plague"—tuberculosis.

Upon the medical profession depends, to a great degree, the success of efforts to intelligently apply the modern methods of opposing and counteracting the communication of this subtle and dread scourge of humanity. It is our duty to educate the "masses" as to the contagious character of this widespread malady. Though greater progress has been made in the eastern provinces of the Dominion and the republic south of us, we are now taking more active interest in this modern crusade, and, through the untiring efforts of the secretary of our Provincial Board of Health, definite steps are now being taken for the establishment of a sanitarium.

The consideration of "prevention of tuberculosis" opens to view the limitless field of preventive medicine in general, a field so vast that I merely mention it so that the intimate relations between the profession and the public may arouse the attention and interest the cause demands.

In addressing to you, as brother practitioners, these rambling remarks, your further active efforts in a cause constantly with us, I am aware that the appeal is made to a body of gentlemen who ever have been and are foremost in philanthropic work and who perform more charitable labor than all other professions combined. I trust these observations may assist us in the more faithful discharge of duties entrusted to our care; for, being fully conscious of my inability to effectively handle a subject so replete with problems and possibilities, I feel that these remarks have fallen very far short of what the important questions demand.

Items of business and matters of public and professional import will be laid before you for discussion and consideration. Questions bearing upon education may demand your serious attention. You will be asked to consider the question of fees in life assurance examination; this is a question savoring of commercialism, but, considering the conditions which at present exist, it is imperative that we deal with it.

These and other matters may be presented, concerning which I feel confident your careful and prudent deliberations will lead to wise resolutions.

We are highly favored by having with us so many visitors, and, as the programme offers a list of subjects rich in educative thought, I take this opportunity of thanking you for your patient attention while listening to this prosy address, and now have pleasure in presenting to you papers of much more interesting character by gentlemen prominent in the profession, not only in British Columbia, but also in the republic of the Stars and Stripes.

Hoping the subject material placed before you may evoke friendly criticism and discussion, in which I most cordially invite our guests from the south to participate, I willingly resign the future conduct of the session to your care.

THE HEART IN PHTHISIS.*

By A. P. PROCTOR, M.D., VANCOUVER, B.C.

I am bringing this subject before you very briefly because in treating and watching cases of pulmonary tuberculosis the importance of a careful safeguarding of the heart, as well as the evidence it gives as to the progress of the disease and its usefulness from a prognostic standpoint, has so often been conferred upon me. I have wished to emphasize it too, because in my reading I have been able to find so little bearing upon this subject. This may be because my reading has not been extensive enough or that the significance of the heart has not seemed of so great importance to others of greater experience, but the fact remains that little emphasis appears to have been laid upon the heart and circulation in phthisis and that to me it has seemed of very great importance indeed. When one considers the pathology of phthisis and the interdependence of the heart and respiration, the wonder is that in so many cases of phthisis the heart does its work so well and for so long a time. Because it must be admitted that in many cases beyond the acceleration one would naturally expect in any case of fever or debility there are few evidences of cardiac change. I might say here I am not, of course, speaking of organic cardiac disease, which, as West says, "is uncommon and when occurring only does so accidentally." I have not been fortunate enough to have done many post mortems on cases of phthisis. Some here may have had greater opportunities. In private practice it is hard always to overcome the natural repugnance to a post mortem, and this, I think, is particularly true of patients dying of phthisis. My evidence, then, has nearly all been taken from physical signs and observations during the course of the disease.

From these observations I am of the opinion that embar-

*Read at annual meeting of British Columbia Medical Association, August 1st and 2nd, 1906.

rassment of the right side of the heart, with its resulting dilatation and final failure is far more common than has been suspected, and this is particularly true where the type of the disease is febronal, but is not confined to this form of the disease or even to cases where the area of the disease is extensive, as I shall hope to show.

There is another class of case which we have all seen where heart action is poor and extremely rapid from the very first. I mean a rapidity much greater than what might be termed the normal acceleration of these cases, and which, as I have said, is to be looked for. In this class there are no evidences of cardiac dilation—no evidence of right ventricle embarrassment, but for some reason in this class of case the heart action is profoundly affected. Why this is so I am not clear. Probably the cause is different in different cases. It may be due to virulence of infection—to poor resistance—some nervous cardiac toxic idiosyncrasy. There may be others here who can explain it better than I. But these cases are not uncommon and, as a rule, they are the cases that do badly. It was because of my observations in these cases that I wished to bring before you the importance of safeguarding the heart in phthisis and saving some cases which I have felt are being lost because of its neglect.

It is, of course, very hard to divide the victims of any disease up into groups for classification, but I simply wished to bring these few types of phthisical cases with marked heart symptoms before you and emphasize their importance, because I believe that by the neglect of the heart and circulation many cases are now lost that might at least have had their lives greatly prolonged, if not saved.

The following case illustrates well, I think, the danger of treating the obvious and primary condition in the lung and neglecting the heart :

M. W., aged 42, a railroad conductor, developed chronic phthisis. He had diffuse areas of consolidation, chiefly confined to the right lung. No breaking down of lung tissue, very slight evening temperature. Chiefly complained of dyspnea. No expectoration. The heart, however, showed some enlargement. There was great accentuation of the second pulmonary sound, which became weak after exertion. He did well as long as I could keep him quiet, but he was very anxious to resume his train. So, to save him from the temptation of work, I sent him away and warned him of the dangers of exertion. He returned considerably improved and foolishly consented to go as delegate to a railway convention in Cincinnati just when the weather was hottest and most trying. The long railway journey, the heat, and his exertions at the convention proved too great a strain. He

became very ill and died at his hotel in what was termed a sort of "asthmatic spell from heart failure." There can be no doubt but that his right ventricle failed at last under the strain of his incessant unrest.

The second case I bring before you differs in that the extent of the lung involvement was very slight indeed.

Miss G., aged 24, university graduate, and a school teacher, tall, thin, and nervous temperament. Small focus at right apex. Slight evening fever. Persistent cough. She had hemoptysis six months previously. No expectoration. Some moisture detected in deep inspiration.

Pulse, however, persistently high, 90 to 110, increased on slightest exertion, and intermittent. Heart showed diffuse impulse, weak first sound, accentuated second sound and slight increased area. She stayed in Kamloops some months and did very well as long as she was quiet, but becoming restless, went to California. Here they struck bad weather and moved about continuously from place to place, hotel to hotel, and we were shocked to hear of her death after a few days' illness, from what the death certificate stated was heart failure. There has been no doubt in my mind that this girl might at least have been preserved for months, if not for years, with proper rest and care, and I have often blamed myself for not insisting on her staying where she was, or at least pointing out more clearly the grave risks of exertion. I don't know that I have ever had a case in which the importance of the care of the heart in phthisis was more impressed upon me. Only a few days ago I saw a case of marked lung consolidation in a patient who had no expectoration, trifling evening temperature, but whose heart was running constantly between 120 and 140. The first sound was strong and booming, but the second pulmonary was getting weak, with almost a suggestion of incompetency. In these cases you will observe the temperature was trifling, there was no expectoration, the striking reaction of the organism to the disease was shown by the heart.

In pneumonia I believe most men pay infinitely more attention to the heart than to the lungs. They leave the lungs largely to look after themselves, believing that a crisis will come independently of anything they can do. The heart, however, they watch closely. The patient is kept absolutely at rest, and every indication of failure is met at once because it is realized from first to last that here the chief danger lies.

How different is the case with our phthisical patient. Too often in the presence of the obvious primary disease the circulation is almost entirely neglected. We allow our patient to go round if the fever is not above a certain point. I know,

of course, that pneumonia is acute, while phthisis is usually spread over a length of time, that the infection differs, that nature always accommodates herself better to a gradual than to an acute strain, but while all this is true, we have been too apt to overlook the heart in phthisis and the results have often been disastrous. Temperature has been emphasized and circulation minimized. I want to say here that in my opinion the temperature record is of infinitely less importance than the pulse. I will go even further, and do not misunderstand me, I do not want to minimize the importance of temperature reaction, but I believe if in a case of phthisis you have a poor pulse with a failing pulmonary sound, and in which the temperature reaction is trifling you allow such a patient to go round, you are permitting that patient to commit suicide just as surely as you allow a case of acute tubal pneumonia to walk the street.

I must apologize for having presented this phase of a great subject in a somewhat disconnected way. Human beings are hard to tabulate, cases of disease are always hard to classify and must of necessity always be so.

I have not attempted to go into the question of treatment—as to how these conditions should be met. I have tried to bring before you certain facts as I have seen them, and draw certain conclusions. What I have tried to emphasize is :

1. That in all cases of phthisis the heart should be carefully watched and forms a reliable index as to the progress of the patient.
2. In a certain class of cases—not so small or unimportant as has been supposed—the heart is in great danger of right ventricle failure.
3. There is another class of patients whose pulse is accelerated from the first far above what might be called the normal cardiac reaction to the disease.
4. That the evidence offered by the pulse is of greater significance than that offered by the temperature just as I believe is the case in abdominal lesions.
5. That the prognosis in cases in which the circulation is profoundly affected is grave, and vice versa.

SOME MISTAKES IN DIAGNOSIS OF VASCULAR LESIONS.

By B. D. GILLES, M.D., VANCOUVER, B.C.

I feel that I must preface my paper with a double apology to this Association: In the first place, because the title of the paper is somewhat misleading; it was intended originally to cover more ground than it does, and to include errors of diagnosis of several varieties of vascular lesions, such as thrombosis and hemorrhage of the cerebral vessels, also of angina pectoris and rupture of the heart, but in gathering the material together I became more impressed that it would be of greater value to limit the field and to describe as accurately as possible the clinical picture of the cases mentioned. It is for this detailed account which I must also beg your pardon, but in cases which have been wrongly diagnosed, in thinking over them we must consider everything which the physical examination revealed and attempt to put our finger on the point where we went astray.

I think, however, I need offer no apology for bringing cases of mistakes in diagnosis before your notice, for I am more and more convinced that by our mistakes we learn more than by our successes. Our mistakes ought to teach us humility, and we should, the longer we practice, be more imbued with the milk of human kindness, especially towards our fellow practitioners who may have fallen over a case under their care. I always feel when I meet a man who does not remember many mistakes that he has made in his professional work, that his field has been an extremely limited one, and that his mental vision is defective, myopic, so to speak.

The cases that I shall speak of are three in number, and to them I may add a fourth, if time permits. In each of the first three cases the tension was at the same site, in each it was of the same nature, and in each case it coursed under a different clinical picture. I speak of aneurysm of the third part of the arch of the aorta and upper part of the descending thoracic aorta.

Case 1. Female, age 56, was admitted to the woman's surgical ward of the Montreal General Hospital, on May 26th, 1904, complaining of an abscess in the back and burns about the body from the application of hot water bottles.

The history of the present illness is as follows: In December, 1903, an abscess formed at the inner side of the inferior

angle of the left scapula. On January 9th, 1904, it was incised and pus and blood were evacuated. Although dressed regularly and kept clean, the wound showed no tendency to heal, but frequently bled freely. On account of this tendency to remain open, a second, freer incision was made, and this time no pus was found, but the bleeding was profuse. Drainage was used, and bleeding persisted, but the wound showed no evidence of healing. The patient lost flesh and strength rapidly and became very pale and sallow. Two weeks before admission she began to suffer from attacks of faintness, with coldness of the extremities. It was for this that hot water bottles were used, and they caused sloughing of the superficial tissues in the left axilla. The personal and family histories contain nothing bearing on the present illness.

Present Condition.—The patient is a poorly nourished, pale, emaciated woman; the mucous membranes are pallid, the skin almost of a lemon tint. She appears dull and lethargic, speaks very little, and complains of no pain.

Circulation system pulse rapid, 120 irregular, small and weak. The whole left side of the chest pulsates with the heart beat, especially in 5th and 6th spaces. The apex beat is diffuse. Cardiac dullness begins at the third rib above and extends transversely from one inch to the right of the sternum to the nipple line. At the apex the first sound is clear, sharp and high pitched. At the base over the pulmonary area the second sound is heard, sharply accentuated and accompanied by a rough, blowing systolic murmur transmitted down the sternum and towards apex, but not into the axilla. Aortic second also accentuated.

On examination of the lungs there were heard at the bases posteriorly numerous coarse mucous rales, otherwise normal. Liver and spleen normal. At the inferior angle of the left scapula and slightly to its inner side is seen an ulcerated area from which blood oozes freely. The edges of the ulcer are deeply undermined. In the posterior part of the left axilla are two dark, firmly adherent sloughs lying close to each other. Over the abdomen are seen a few reddened indurated spots, one 2 inches below umbilicus, being $\frac{3}{4}$ inch in diameter, is covered by a scab.

The patient had been in the hospital for five days when she died. While under observation nothing further was made out. The ulcer bled only slightly until on the morning of the day of the patient's death, when between two and three ounces of blood were lost. The pulse became more rapid and weaker, and in a short time failed completely. The patient did not complain of pain at any time. The mental dullness increased somewhat after admission.

At the autopsy, which was performed four and a half

hours after death, the following conditions were observed: The skin of the cadaver was of a distinct lemon tint. At the inferior angle of the left scapula was an ulcerated area 1 inch in diameter. The edges were indurated and deeply undermined. The finger could be passed beneath them for a distance of $1\frac{1}{2}$ inches upwards and two inches downward. The base bled freely after this manipulation. On removing the sternum it was noted that the pericardium was unusually prominent, as if it were pushed forward. The heart was dilated, of a pale brownish color, and the muscle friable. The lungs were emphysematous and presented evidences of healed tuberculosis at the apices of both upper lobes. The kidneys showed chronic nephritic changes. The spleen was somewhat enlarged.

The interesting finding, however, was the presence of a large aneurysm of the descending part of the arch of the aorta and the upper part of the thoracic aorta. The aorta itself passed downward in the thorax over the anterior surface of the aneurysm, which extended from the 5th to the 11th dorsal vertebra. The tumor was in shape elongated and rather narrow and varied in consistency at different parts. The anterior and lateral walls were well defined, but the posterior wall was so intimately associated with the tissues forming the wall of the thorax that in removing the mass the aneurysm was cut into, fluid blood and numerous large clots escaping. The bodies of the 6th-11th dorsal vertebrae were extensively eroded. The communication between the sac of the aneurysm and the lumen of the aorta was by means of an opening $\frac{3}{4}$ inch in diameter in the posterior wall of the aorta at the level of the lower end of the arch of the aorta and the upper part of the descending thoracic aorta. The most prominent part of the aneurysm corresponded exactly with the site of the external ulceration.

Case 2.—Male, age 47, laborer, was admitted to the medical ward of the General Hospital, on October 28th, 1904, complaining of "pleurisy of the lung," cough and expectoration, loss of weight and weakness. The present illness began five months before admission with slight pain in the back and chest, which were transitory and usually worse in the morning. One month later dyspnea on exertion was noticed. It was sometimes very pronounced, but the patient could always remain at his work even during the worst "spells." In July cough set in and during the past month has become much worse, and is aggravated by exposure to cold. It has been accompanied by a whitish expectoration for the last two weeks. Since four weeks he has lost 25 lbs. in weight, and during this time has lost strength rapidly.

For a week he has been feverish at night, but has never had any night-sweats. Swelling of the feet and ankles especially marked in the morning, has been present of late. The urine for two months has been scanty and high colored. Two days ago he was told by his physician that he had a left-sided pleurisy.

In the personal history the following data were obtained: He has worked as a laborer for 15 years. Twenty years ago he had a sore on his penis, which was "cured" in two weeks, and was not followed by any secondary manifestations so far as the patient is aware of. He uses alcohol and tobacco. The family history contains nothing bearing on the present condition.

Physical examination reveals the following: The patient is a fairly nourished man, with rather flabby muscles, cheeks flushed, skin warm and moist.

Lymphatic System.—Glands of inguinal and femoral groups enlarged and palpable.

Respiratory System.—Cough troublesome, noisy, and almost whooping in character, not accompanied by expectoration. Respirations rapid and dyspnea present on exertion. Cyanosis of lips and ears is present.

Inspection of chest shows it to be well formed and symmetrical, with somewhat limited expansion, that on the left side being more shallow than on the right. Palpitation confirms inspection and V. F. is absent over whole of left lung.

Resonance of right lung in front extends from above the clavicle to 6th rib in the nipple line and posteriorly to the 11th rib. On the left side the percussion note posteriorly is flat from apex to base; in front from apex to 5th rib, and in the anterior axillary line the note is flat throughout. Over a small area at the level of the 2nd and 3rd costal cartilages and spaces reaching from the left sternal border outwards for a distance of 2 inches is skodaic resonance. On auscultation of the right lung, the breath sounds are heard of a vascular character throughout, with somewhat prolonged expiration. Over the left lung the breath sounds are inaudible below the level of the 2nd rib; above they are distinctly blowing in character. Broncophony is heard all over the left lung.

Circulatory System.—There is slight cyanosis of lips and ears; no edema of the lower extremities. The veins of the neck are prominent. The radial pulse is of large volume, fair tension, regular in rhythm, no marked thickening of the vessel wall, rate 100, blood pressure 135 millimeters of mercury.

Apical pulsation is visible in the 4th space in the left parasternal line 2 inches from the mid sternum. Palpitation confirms inspection. The right border of cardiac dulness

reaches the middle of the sternum, the upper and left borders cannot be definitely outlined, as cardiac dullness passes into that over the lung area.

On auscultation the sounds at the apex are best heard in the 4th space in the left parasternal line. The first sound is replaced by a soft systolic murmur transmitted to the anterior axillary line. The second sound is accentuated. At the base the aortic 2nd is slightly accentuated and the pulmonary 2nd is accentuated and reduplicated. No murmurs are audible in these areas.

The examination of the abdomen and nervous system revealed normal conditions.

The urine presents the following characteristics: Quantity, 30-40 ounces in 24 hours. Color, clear amber, reaction acid; specific gravity, 1.017-1.021; albumen present in traces, sugar absent. Microscopically granular and hyaline casts.

The following is a resume of the course of this disease while the patient was under observation in the hospital: The temperature showed a daily variation of about 3 deg. F. The evening temperature reached 101 deg. F. or over after admission, except on two days. The chart presented a hectic type of temperature. The pulse rate at first ranged between 88 and 100, later dropped slightly in frequency to between 72-96, and towards the end increased very slightly. The respiration persisted somewhat increased in frequency.

The cough remained troublesome and kept patient awake at night. It was not accompanied by any expectoration during the first 10 days after admission. On Nov. 1st the left pleura is aspirated, but only two ounces of blood-stained fluid were withdrawn. The physical signs remained unchanged after the aspiration. By the middle of November the skodaic resonance below the inner end of the clavicle had disappeared and breath sounds were only extremely feebly heard over the whole of the left lung. The cough still persisted and was now accompanied by a muco-purulent expectoration. No tubercle bacilli could be detected in the sputum. The patient failed in weight and strength and the skin and mucous membranes became pale. No further change in physical signs was observed till December 1st, when a pleuro-pericardial friction rub was heard along the left border of the heart. This persisted for one week. On December 12th the patient was allowed to get up out of bed. The cough had become less troublesome, and the expectoration diminished in quantity. The following day, after a slight coughing "spell," the patient had a severe attack of hemoptysis, during which 3 ounces of bright blood were spat up, followed immediately by loss of consciousness for 30 minutes, during which the pulse was extremely small. The patient rested well

through the night, and the following day expectorated some dark clotted blood. For two days the sputum was blood-stained. On December 17th examination of the chest revealed no change in physical signs. During the following week the cough was troublesome, especially at night, but hemoptysis did not recur. The patient, however, gradually became weaker. On the evening of Dec. 27th, after a slight fit of coughing, the patient expectorated 3 ounces of bright blood. He immediately lost consciousness and died in a few minutes. On only two occasions while under observation was pain complained of. On the first day after admission the patient said he felt shooting pains in his chest and back, and during the period that the pleuro-pericardial friction rub was present pain was complained of in the left shoulder.

Only the essential points in the autopsy findings will be mentioned. The examination was performed about 17 hours after death. On removing the sternum the right lung was found to extend across the middle line from above downwards to the level of the third costal cartilages. The left lung could be seen retracted, and shows evidences of adhesions, some fairly recent, others more firm and of longer standing. The left pleural cavity contained about 20 ounces of blood-stained fluid. The right lung presented the microscopic appearances of an emphysematous lung. The bronchi were filled with blood clots. The weight of the lung, 600 grammes. The left lung was much smaller, but heavier than the right; the weight, 910 grammes. It was firm and almost airless. The root of the lung shows attached to the bronchus the wall of an aneurysm which has eroded the wall of the bronchus. The cut surface of the lung is of a diffuse, greyish yellow granular appearance, and the consistency much increased. The bronchi are filled with mucus and blood. Microscopically, the lung tissue presented the histological picture of chronic pneumonia. The heart was somewhat enlarged, the ventricular walls thickened and muscle friable. There was slight dilation of the cavities.

The root of the aorta showed marked sclerosis and athetoma. The coronaries presented a patchy sclerosis. From the descending part of the arch of the aorta a sacculated aneurysm, the size of an orange, took its origin. It pointed upwards and slightly backwards. The bodies of the 4th, 5th and 6th dorsal vertebrae were deeply eroded. The left bronchus was compressed and close to the bifurcation practically formed part of the wall of the aneurysm. The esophagus also is in intimate relation to the wall of the aneurysm and its mucosa showed a bluish red discoloration at this level. A second aneurysm was present at the level of the celiac axis and pointed backwards, causing superficial erosion of the

11th and 12th dorsal vertebrae. The walls of the aorta showed extensive sclerosis and atheroma. The stomach contained a large quantity of clotted blood.

Case 3.—Male, 42, was admitted to the medical wards of the General Hospital on November 30th, 1904, complaining of shortness of breath, cough, weakness and swelling of the feet and legs.

The onset of the illness was rather abrupt, coming on after the patient became chilled on leaving a hot foundry where he had been perspiring freely while at work. He felt sick, weak and very chilly before reaching home. The following day he remained in bed, the cough became troublesome, and was accompanied by profuse expectoration. The next day he began to get up in the afternoon. Cough and expectoration persisted, and a few days after the onset of the illness dyspnea set in. This was frequently worse at night, forcing him to sit up in bed. Nausea and vomiting were present and headache was troublesome at intervals. The appetite was poor. For two weeks there was obstinate diarrhea. The swelling of the feet and legs was of one week's standing. The urine has not changed in amount, but recently has been high colored.

Personal History.—The patient has always had heavy work in an iron foundry. Nine years ago he had quinsy. There is no history of rheumatism, but a history of moderate alcoholism and use of tobacco was obtained. He denied luetic infection.

Physical Examination on Admission.—The patient was a well nourished man, lies propped up somewhat in bed. The lobules of the ears, lips and finger tips showed considerable cyanosis; edema of the feet and legs, backs of thighs and of the lower lumbar region present. The respirations were labored and the alae nasi dilated with inspiration.

The chest was deep from before backward and sub-costal angle wide. The breathing was chiefly abdominal and the chest expansion only $\frac{1}{4}$ inch. On percussion the note was hyper-resonant on the left side in front of the 4th space and on the right side to the 5th rib; posteriorly resonance extended to the 11th rib on the right side and at the left base there were three finger breadths of dullness. Auscultation revealed only the presence of a few rhonchi over the lungs and the absence of breath sounds over the dull area. The sputum was abundant, thick and muco-purulent.

Circulatory System.—Pulse rate 112, collapsing, capillary pulse visible beneath the finger nails. The arteries at the wrists are somewhat thickened.

Cardiac pulsation not visible nor impulse palpable. The percussion showed the heart to be enlarged, the transverse

dulness being 5 inches, the left border 1 inch beyond the nipple line. On auscultation a low, diastolic murmur was heard at the aortic cartilage. Liver dulness extended $1\frac{1}{2}$ inches below costal border in the right mammary line.

Urine.—Quantity, 10 ounces; straw color, react., acid; sp. gr., 1018; albumen 12 grammes per litre. Sugar absent, microscopically granular hyaline and blood casts, blood and pus cells.

The patient remained in hospital to the time of his death, which occurred 15 days later.

During this time the most prominent clinical feature was the extreme dyspnea from which the patient suffered. It was constantly present but paroxysms occurred which were extremely severe and prolonged. The slightest exertion brought on a spasm, but more frequently the attacks were spontaneous. The edema of the lower extremities disappeared. The cough and expectoration lessened. The dulness at the left base persisted, and towards the end numerous coarse crepitations were heard at both bases of the lungs posteriorly. The urine at times was smoky and the albumen varied from 2—12 grammes per litre, the quantity of urine from 10—35 ounces in 24 hours.

A few days before death a systolic and diastolic murmur could be heard at the aortic cartilage. The latter was transmitted to the lower end of the sternum. At no time was any pain complained of. Three days before death the patient became delirious at intervals. The pulse became irregular and weaker. The patient developed continuous fever on the 5th day after admission, the temperature ranging between 99—102° F. and lasted for 3 days. No sufficient cause could be determined for the elevation of the temperature.

The following is the pathologico-anatomical diagnosis from the autopsy findings: Arterio sclerosis with atheroma. Hypertrophy and dilation of the heart. Aneurysm of the descending part of the arch of the aorta. Erosion of the bodies of the 5th, 6th and 7th dorsal vertebrae. Bilateral hydrothorax, acute bronchitis with broncho-pneumonia, chronic interstitial nephritis, chronic congestion of the spleen and liver.

The aneurysm sprang from the descending part of the arch of the aorta pointed backwards and inwards, eroding slightly the bodies of the 5th, 6th and 7th dorsal vertebrae to the left of the median line. The size of the sac of the aneurysm was almost that of a lemon. The esophagus was somewhat compressed, but no definite signs of pressure of the left bronchus were evident.

From these three cases we might build up the symptom complex of aneurysm in this region, bearing in mind that

only one symptom may be present, and for a time there may be none. Dyspnea seems to be most constant of all; cough and expectoration are present. The latter varies in character. It may be mucoid, muco-purulent, or even fetid hemoptysis frequently recurring and rather profuse is extremely suggestive of aneurysm. Pain is inconstant and may be slight, even with erosion of vertebrae. The 5th to the 7th are most frequently affected. Pressure on the esophagus may occur. Emaciation may be rapid and may be due to dysphagia, or it may be in some cases dependent on compression of the thoracic duct.

As to physical signs, there are changes within the left pleural cavity referable to the respiratory system, such as consolidation of the lung, or better, diminution of air within the lung spaces, or it may be the picture of an effusion. A tumor in the interscapular region, especially on the left side, whether its nature seems to be simply inflammatory or not, or whether it is pulsating or not, should always suggest aneurysm.

In conclusion, I have little to add. We have here three examples of aneurysm springing from the same site, coursing under totally different signs and symptoms. The third case may be said to have given rise to no symptoms, if we regard the dyspnea as purely uremic. In the second case the clinical course was that of pulmonary tuberculosis. Doubtless this case would have gone to swell the statistics of the white man's plague had an autopsy not been granted. Temperature, accelerated pulse rate, wasting, loss of strength, cough, expectoration, hemoptysis, all were present. There lacked only the one thing needful, the tubercle bacilli. The autopsy gave the explanation. The lesson to be learned from the first case is too clear: no remarks of mine are needed.

We are taught that pain is one of the most constant symptoms of aneurysm, and yet in these three cases, even with erosion of bone, pain was insignificant or absent. We see that physical signs in our cases often are writ in a language which we seemingly cannot read, or they speak in whisperings apparently too low for us to hear. In many cases the fault is our own—our vision is defective, and our hearing dulled.

In these cases the autopsy table gave us the key and bore out the motto of the Pathological Society of London—"nec silet mors"—death is never silent.

A CASE OF DERMATITIS HERPETIFORMIS.

BY F. J. KENNY, B.A., M.D., NEW WESTMINSTER, B.C.

Mr. President and Gentlemen,—In this case, which I hope you will have an opportunity of examining, the diagnosis of dermatitis herpetiformis was made by exclusion, and I have great pleasure in submitting the case to the consideration of the members of the British Columbia Medical Society for the rejection or confirmation of the diagnosis.

In 1884 Dr. Louis A. Duhring, of Philadelphia, classed under the name dermatitis herpetiformis several forms of skin disease, which were previously known by distinct titles descriptive of the different maladies. It is now often known as "Duhring's Disease," though no newly discovered skin affection was included by Duhring.

Malcolm Morris' description of the disease is brief and clear. He defines it as a neurosis of the skin, of which the distinctive feature is the multiformity of the lesions by which it manifests itself.

Intense itching is generally but not invariably present. Almost any part of the cutaneous surface may be invaded, but in the majority the limbs, especially the wrists and forearms, are the first points of attack. The lesions, as they subside, leave pigmented areas of greater or lesser extent, the pigmentation varying from dirty yellow to an almost coppery brown. The discoloration is often very persistent. The skin remains thickened and rough, and pitted and scarred from excoriations forming beneath the scabs.

In severe cases the disease is ushered in by fever and general constitutional disturbance, often with marked cutaneous irritation before any lesion of the skin is visible. Thus the relapse can be often foretold many days by the patient. The appearance of the skin eruption is often sudden, erythematous, papular, vesicular, pustular, and notcorial elements may be mingled together in every conceivable variety of size and shape, and in all stages of evolution.

Usually the earliest lesion is a vesicular eruption on an erythematous base. In the earlier stages these dry up and form scabs; later they tend to run together and form bullae, often of considerable size. These bullae do not, as a rule, burst spontaneously, first clear, the fluid contents gradually become opaque, thicken and the bullae slowly shrink, and finally shrivel up to a thick brown scab.

The disease shows a marked tendency to recur. The essential features are :

1. The multiformity of the eruption.
2. Disorders of sensation of varying intensity, itching, burning and pain.
3. The protracted course and constant tendency to exacerbation and recurrence.
4. The absence of any grave impairment of health, in spite of the physical suffering and mental anguish due to the disease.

Diagnosis.—This must rest on the following points :

1. Multiformity of the lesions, and under this head must be counted the scars, pits, and pigmentary blotches left by previous attacks, as well as the vesicles, bullae, etc., actually present.
2. The intensity of the itching.
3. The frequency of relapses.
4. The general refractoriness of the affection to treatment.

Differential Diagnosis.—The following diseases must be considered.

1. Pemphigus, usually well-formed, large blebs in a normal skin, no itching or burning.
2. Hesperes, vesicles on inflamed base, pain and burning moderate, no itching, course acute.
3. Erythema multiform, vesicles, blebs and pustules very rare, no itching, very little pain and burning, color of lesions dusty red or brownish.
4. Naticasia, erudated lesions do not arise independently of wheals, and the eruption is not multiform.
5. Eczema, vesicles different, in eczema spread into large irregular areas, in D. herpetiformis they are grouped. Moist erudative surface absent in latter.

Case History.—Miss R., aged 20, born in Manitoba. Father living, 51, of Scotch descent. Mother, born in Montreal. French-Canadian, died from pneumonia 3 days after childbirth. Brothers, one living, one dead, accident. Sisters, four living, one died at two months.

There is no history of any one of patient's family being similarly affected, or sick from any chronic disease.

When 8 years old tonsillotomy was performed for enlarged tonsils : soon afterwards leucothermia developed. The hair is also gray.

When 14 patient began to menstruate, never regular, occurs only once every three or four months, flow slight, not painful.

At 14 brown pigmentation appeared all over the body

with yellow scleral, gradually deepening. The intensity varies from time to time. These conditions, leucoderma and pigmentation, are usually accepted as of neurotic origin, and seem to point to a disturbance of the nervous system, which may be an important factor in the etiology of the dermatitis herpetiformis.

Diphtheria at 16. Some form of operation was performed on throat two weeks after sickness. Patient then went to Victoria for treatment for her general health, and while there, in the spring of 1903, she contracted varicella, then pneumonia developed, and soon varicella gangrenosa followed, the remains of which are now present in the shape of large irregular scars. Though varicella gangrenosa is supposed peculiar to children, and thus named "Varicella gangrenosa infantum" by Crocker, yet there can be little doubt of its presence in this case at 17.

Present Illness.—After this attack in Victoria some eight or nine months later in Kamloops she was laid up with what seemed to her a recurrence of these ulcers, but from her description it seems to me to have been an attack of dermatitis herpetiformis. The lesions were generally distributed on the limbs, quite different from the location of her later five attacks, which occurred this year. These had the lesions all localized on the left hip and thigh, extending from the crest of the ilium to within two or three inches above the knee joint, the only part of this region unaffected being the internal aspect of the thigh.

The attacks began with a chill after some prodromal symptoms of sore throat, joint pains, etc., for a few days before. The chill lasts about three or four hours, then fever, usually high, 104 to 105 degrees and over, follows, also redness over region affected, intense burning, swelling and pain, no itching in the beginning in this case, then vesicles, blebs, bullae, pustules, which latter open later and discharge for weeks.

The attacks which appeared this year began respectively in February, April, May, June and July, and lasted some two to four weeks, except the last, which is still in progress. The fever remains high as a rule, for three or four days 104 to 106 degrees, then gradually decreases, but continues at night for a long time afterwards. The redness continues till the discharge is free. Vesicles and blebs form in a day or two. During the attack the throat is sore, and the joints painful on movement.

There is sometimes difficulty in urination. I could find no disturbance of sensation of any note.

The present attack seems to differ somewhat from the four previous ones of this year. It is not so severe in most

respects. Though a very severe cough with bloody expectoration preceded the attack of pleurisy. In the former attacks there was nose-bleed. The present attack began July 25th, and is now (Aug. 2nd) subsiding. On July 29th a dry pleurisy developed in the right side posteriorly, and now there is effusion.

Condition between attacks is good, appetite excellent. sleeps well. The weight fluctuates little. The nose bleeds easily. The bowels alternate between constipation and diarrhea.

The urine was examined a few days ago and found free from sugar and albumin.

TWO CASES OF SUPRA-PUBIC PROSTATECTOMY.

BY CHAS. M. SMITH, M.D. PEACHELAND, B.C.

D. J——n, a farmer, aged 61, living six miles from office, after suffering for twenty-four hours from retention of urine, sent for relief. Had great difficulty in passing catheter, but at length succeeded with the long prostatic condé variety. Owing to inclemency of weather and almost impassable roads, I was forced to secure catheter in the bladder and close its orifice in usual manner. Later I had him removed to town and instituted regular vesical irrigation, with internal administration of urotropin. In ten days urine lost its alkaline character.

Assisted by Dr. P., I removed the median lobe of the prostate after the following technique: As experiments and frozen sections have proved that the restal colpeurynter has little effect in raising the anti-vesical peritoneal fold I relied entirely on the distention of the bladder, which tolerated (under anesthesia) ten ounces of boric solution.

Abdominal and pubic surface having been shaved and sterilized the previous evening, and a gauze pad saturated with solution of green soap secured over site of incision, patient had, according to my usual practice, 15 grs. of chlore-tone administered twenty minutes before anesthesia was commenced, which was induced by chloroform.

An incision $2\frac{3}{4}$ inches in extent in skin and cellular tissue. lower end reaching below symphysis. A transverse incision was made across the fascia at lower angle of wound, thus

affording more room when retractors were used. The point of the scissors was introduced and the fascia further divided to upper limit of skin incision. Recti separated, transversalis divided, and the hooked extremity of a wire retractor introduced into lower angle of wound and rotated 90 degrees. The pre-vesical fat, with venor plectu, was teased apart by fingers and blunt dissector, when with palmar surface of finger resting over bladder, the organ, hitherto empty, was distended by warm boro-glyceride solution.

A tenaculum was introduced through the wall of the bladder at the extreme upper limit of the wound (for once the bladder is emptied it is dangerous to extend the wound upwards) the scalpel entered through the same opening and carried steadily downward for $1\frac{1}{4}$ inches. Two pairs of tissue forceps were used to bring forward the bladder and hold margin of wound open. Irrigating fluid was permitted to run until the obscurity resulting from presence of blood had cleared, but as the discoloration returned from even the gentlest manipulation, a short cylindrical speculum was inserted with distal end surrounding the prostate gland, wound in bladder having first been extended slightly.

With finger of assistant in rectum pressing prostatic portion firmly against speculum, the fluid within the lumen of instrument was removed by small sponges held in forceps, and a good view of the sessile enlarged middle lobe obtained. This had acted as a ball valve at urethral orifice. Assistant raised the gland well towards surface; speculum removed, mucous membrane incised, separated laterally, anteriorly and posteriorly, and lobe removed by the Emmett trachelorrhaphy scissors with blades closed. The free hemorrhage was controlled by irrigating with a hotter solution. The first joint of index finger could now be introduced into urethral opening from bladder.

Wound was closed, save at lower end, with two tiers of suture of chromicized gut, the first alternating with the second and piercing the cut edges of vesical incision; the second row inserted as Lembert sutures. A soft rubber tube of $\frac{1}{2}$ -inch lumen was held in bladder by one of the Lembert sutures, and dipped at its outer extremity below the surface of an antiseptic solution. A drainage tube of iodoform gauze wick, enclosed in oil silk, was laid along line of sutures with its end protruding from lower extremity. The tube was removed after 48 hours.

Skin incision was closed with interrupted S. W. gut sutures and surface dusted with iodo-bismuth, No. 2. As the first case was one suitable for vesical suture, the second forms a contrast in that the tissues were in such an unhealthy condition as to render such a procedure unsafe.

O. S——n had led a catheter life for three years; was now 53 years of age. Had been sounded for calculus by Dr. Peters, of Toronto, with negative results. Was suffering from right-sided orchitis on my first visit. Used the aspirator; atrophy followed, as revealed at my second visit about a year subsequently.

He was now suffering from a suppurating left testis. With a pulse of 136, temperature of 104.5, and respirations 28 per minute, I did not deem it safe to castrate. Made free incision under local anesthesia, curetted sac, formed by adherent tunics, tamponaded with gauze. Healing took place rapidly. A rectal examination revealed a prostate as large as an ordinary lemon. Although the severe urethritis subsided urethral discharge continued and patient suffered intensely from pain in glans penis, requiring use of rectal suppositories. Hemorrhoids and constipation also added to his "sea of troubles."

Patient was brought into town and placed in a specially prepared room under charge of a trained nurse, preparatory to radical operation. Owing to the irritable and contracted bladder, which would not tolerate more than four ounces of fluid, vesicular lavage was not satisfactory. As to the operation it is only necessary to refer to some minor details in which the technique differed from that described in first case. The prostatic enlargement constituted an indurated collar, choking the urethral opening. A V-shaped portion was removed by the rongeur from the inferior half, while the upper portion was removed by fingers and ostetotome. Vesical wall was much thickened and unhealthy and was left unsutured. A soft rubber drainage tube was secured and bladder wound in manner described by Greig Smith for enterotomy and while the vesical end only entered within the bladder a sufficient distance to secure its stability, the external end was attached to the A< shaped piece of an old stethoscope at B. Tubing from an ewer containing antiseptic borated solution was attached at A and another piece led from C to a vessel on the floor.

Irrigation was performed by the alternate closing and opening of the two tubes attached at A and C by means of modified clothes-pins.

This apparatus can be arranged on a plan suggested by Dr. Dawbarn, of New York Polyclinic, which affords automatic intermittent flow into bladder and receptacle on floor. Boric acid was dusted over wound, a piece of gutta percha tissue laid in position; absorbent cotton packed over this and secured by inter-digitating adhesive plaster strips.

Patient recovered, gained in weight and strength, but

was obliged to wear an apparatus adapted from a large tracheotomy tube with rubber tubing, supplied with pinch cock, and secured to waist-belt, owing to the persistence of fistula. Had the physical condition of the patient permitted I should have followed the supra-pubic incision with a perineal one, and thus secured through and through drainage.

It is worthy of remark that the atrophy of one testis and destruction of the other by suppuration had no beneficial effect on the prostatic hypertrophy. However, we hear very little to-day of the much vaunted cure of prostatic enlargement by orchidectomy.

THE ROENTGEN RAYS IN GENERAL PRACTICE.

BY H. RUNDLE NELSON, M.D. (DUBLIN UNIVERSITY), VICTORIA, B.C.

Gentlemen : In this short paper to-day, it is not my purpose to treat this subject from the scientific standpoint of the radiologist, but rather from the standpoint of utility to the surgeon and general practitioner. I will, therefore, simply bring before you some few cases that have come into my hands in British Columbia and refer to others that have a direct bearing on the subject.

With regard to fractures, so much may be learned as to the misplacement of the ends of the bones and their relative positions, and also where a joint is implicated, if there is a dislocation, the rays will be found to be a most valuable aid, and especially is this the case where the method of screen examination is used. There are three ways in which the case may be examined ; first the radiograph where a photograph, so to speak, is taken, and the result handed to the surgeon in charge some time after the examination. This method is of use as a permanent record and where the injury is an old one. But where the injury is recent the best method is by the fluoroscope, or, better still, the screen. The difference in these two last named methods only lies in this fact ; with the fluoroscope only one person at a time can see the object, and, consequently, consultation at the time is difficult. By the screen method, which I prefer to employ, the whole room is darkened and acts as the fluoroscope, and two surgeons may easily confer together as to the condition present. A dislocation may be reduced or a fracture set under the illuminated screen ; the patient, if necessary, being put under an anesthetic.

In illustration of this method I may cite two cases. Dr. Robertson brought me a little girl who had fallen off a sidewalk the previous evening, injuring the elbow. He had set it by manipulation, and certainly it seemed in good position, but the screen showed the epiphysis of the humerus was not in place. This was at once and easily rectified under chloroform.

Dr. Fraser had a very similar case, in which Dr. Jones also participated; a little girl with injured elbow. This was also treated in the same way, and in each case the resulting joint was almost perfect. There is no small degree of satisfaction in knowing to a certainty that the apposition is correct and that every reasonable precaution has been taken, for many a man will worry for days over such a fracture, and all this is now easily done away with.

In ununited fractures the cause may frequently be found in a piece of dead bone which can then be removed.

Carl Beck, of New York, recognizes to the full the advantages of X-ray examination in fracture cases, and he has written a very powerful article on this subject in the "Medical Record," of March 24th, in which he states and proves from cases in his practice that the diagnosis and ultimate treatment of a case may be greatly influenced by the condition made known in a Rontgenogram.

Passing now to the location of foreign bodies, these, for all practical purposes, may be divided into three classes.

A. Those which have gained entrance through the mouth or nose and have become impacted in the trachea or esophagus, or have passed into the stomach or bronchi.

B. Calculi.

C. Bullets and missiles introduced by force.

A. Of the first class I have had several instances. A little nigger boy, aged 8 years, was brought to me by Dr. Robertson. He was supposed to have swallowed a large glass bead four days previously; now some signs of dyspnea had developed and a slight whistling noise might sometimes be heard in breathing. From physical signs it was not clear where to expect to find it, but the screen showed it at once in the trachea at the level between the 5th and 6th cervical vertebrae. The bead was in an upright position, and breathing was carried on through the hole in the bead.

Having marked on the skin of the throat its position we took him to hospital and Dr. Robertson extracted it by a low tracheotomy; recovery was uneventful.

This might be spoken of as a positive result; the converse may also occur, as in the case of a little baby one year old who was thought to have sucked a piece of coal grit into

its lungs; it had frequent fits of coughing and spasm. The screen and also the Roentgenogram showed the lungs quite free of any foreign matter, and it was very reassuring to the parents to know that no operation would be necessary. It proved a case of laryngismus stridulus.

Foreign bodies in the intestine, as a Murphy's button, for instance, may be watched from day to day.

B. The second class, Calculi :

-This is a most important class, and the Roentgen rays are a very decided acquisition in making a diagnosis, not only whether stones are or are not present, and whether in the kidney or ureter, but also the number of stones may be indicated and a surgeon is therefore warned as to the number he must remove and is thus helped to perform a complete operation. Vesical calculi can also be demonstrated. Gall stones are not easily shown, as they are frequently quite transparent to the rays.

Thurston Holland, of the Royal Infirmary, of Liverpool, has been able to demonstrate a renal calculus weighing as few as three grains. In this work a special apparatus is advisable, consisting of a compressor and diaphragm. By this means the abdominal contents are squeezed aside and less resistance is offered to the path of the X-rays, and the tube may be brought in closer. Possible sources of error are : fecal impactions and calcified glands. It is therefore not wise to make a positive diagnosis of calculus from a doubtful shadow in an X-ray picture, but one must carefully weigh the concomitant symptoms of pain and hematuria, and in a doubtful case a second negative ought to be taken after an interval of some days, when the difficulty may be successfully cleared up, a good purgative having been administered in the meantime.

C. I come now to that class of foreign bodies of which I may take the bullet as the type.

It is now comparatively certain and easy to locate accurately such a body. There are many devices for this, but I consider McKenzie Davidson's method the best. Its chief drawback is that it requires special and costly apparatus, but being mechanical no calculations are introduced into it.

A special modification is used for foreign matter in the eye.

The difficulty in extracting a needle is great even when its position is very clearly shown, and I think that it is a frequent cause of difficulty to make the incision parallel to the needle instead of at right angles to it so as to strike it at the centre.

Perhaps it is not out of place in this paper to call your attention to the safeguard that is afforded a surgeon by an

X-ray examination of an injury such as a fracture. Should medico-legal proceedings in any way crop up he is in a much better position if he is able to produce a Roentgenogram or the corroborative evidence of the radiologist.

THE THERAPEUTIC ACTION OF THE ROENTGEN RAYS.

Almost all known diseases have been treated by the X-rays, and in the vast majority of cases some improvement, whether permanent or transitory, has been reported by some worker.

But I do not advocate an indiscriminate use of this really powerful agent. There are a number of conditions in treatment of which the rays now hold an undoubted position.

I will merely mention in passing, that a number of skin diseases receive great benefit, namely : ringworm, favus, sycosis, eczema, both dry and weeping, acne and pruritus, and many others.

In the treatment of ringworm wonderful strides have been made and Sabouraud and Bordier in Paris, by means of certain sensitive pastiles which he uses, is now able to treat a case in a single seance with almost certain result. The aim is to cause just sufficient reaction to cause depilation of a temporary character, so that when the hairs grow again they are healthy ; a dose slightly in excess of this quantity may be given in hypertrichiasis and produces permanent alopecia as desired.

Sabouraud's statistics in Paris have risen from 110 cures per annum by old methods to 504, and the average duration from 27 months' treatment to 6 weeks.

I come now to that all important disease, cancer. Although some few inoperable cases have actually been reported cured by reputable authorities, still we can not yet hold out the hope that the X-rays have proved themselves anything like a specific. But this we may almost certainly say, they will allay pain and arrest discharge, while very frequently causing a retrocession of the primary growth. Sarcoma is said to yield more readily than carcinoma.

Epithelioma are considered by such authorities as Belot, Freund, Pusey and Seguiria to be very amenable, and this is to be expected, as the more superficial the growth the more easily it is reached ; the result greatly depends upon the technique employed and the condition of the tube, whether it is of high or low vacuum, as it is well recognized that the low or soft tubes cause more reaction at the surface while the harder ones penetrate deeper, almost leaving the surface untouched.

Rodent ulcer and lupus vulgaris are very amenable to

treatment, though, as in all other things, failures may be met with.

I had an interesting case of epithelioma of the left alae of the nose referred to me by Dr. Frank Hall, Victoria, last December. The patient, an elderly man of good physique, had a small ulcerating growth of about three years' duration removed from the site a year previous, and the wound had never properly healed and recurrence had taken place. Dr. Hall removed it again in November, 1905, and sent him to me on December 3rd for post operative treatment.

The site was still angry looking and constantly discharging a little, and a large scab was formed.

From the third application the discharge ceased and the scab began to dry up, and by Jan. 2nd, 1906, the whole condition was apparently healed, the scab came away on Dec. 18th, after six seances.

Total number of seance, 12. Up to this date there has been no recurrence and the cosmetic effect is good, the scar being fairly soft.

The conditions of treatment which I advocate in cancer are briefly these : If the case is operable, operate ; and then apply post-operative X-ray course about 2—3 weeks later. By removing the mass of growth or curetting, the surgeon is following out sound treatment, and in addition is removing an obstruction which would prevent the rays reaching deeper-seated and outlying particles which the knife cannot reach. Thus each method is a help to the other and in combination constitute the best treatment.

Small epithelioma may not require the knife at all ; the rays themselves can remove them.

Always a larger area than that actually involved should be "rayed," so as to strike any outlying particles.

The old-fashioned and often dirty method of enveloping the patient in protective lead foil is now superseded by the clean glass aseptic shields and there is no discomfort in the administration.

There are, however, a few cases which derive no good from the treatment, but these do not warrant its being laid aside or condemned.

There is yet another disease which has been greatly benefited by the rays, which has proved almost hopeless under any other treatment, namely, leukemia. I will just give a brief account of a case treated by Ironside Bruce at Charing Cross Hospital, London, and reported with another one in the "Lancet" for January, 1906.

The patient, a woman aged 50, had all the usual signs of leukemia, which I need not recount here beyond that the

spleen was tender and enlarged beyond the middle line and could not be felt above the pubes.

The patient was under treatment between July 26th, 1905, and December 8th. During that time she gained weight, the abdomen decreased in size, she felt better in every way. The spleen retracted to $1\frac{1}{2}$ inches above the pubes and 1 inch to left of umbilicus.

A blood count was constantly taken, and the results were as follows :

	Red	White	Rat o
July	3,047,520	400,147	1- 7 6
August	3,150,000	499,000	1- 6 3
September	3,810,000	290,000	1-13 1
October	3,975,000	117,000	1-34
November	4,550,000	72,000	1-63
December	4,550,000	32,200	1-141

While the hemoglobin rose from 60 to 81 per cent. in about four and a half months' treatment.

In conclusion, let me sound a note of warning to all of you who are using the X-rays ; be very careful of yourselves, and remember that if you are not shielded you are absorbing a small dose every time you excite a tube, whether for therapeutics or for examination. Particularly would I warn you against testing your tubes by comparing the result as shown in looking through the fluoroscope at your own hands.

It is so simple a method but so very dangerous. True, it may take eight or ten years to produce its deadly result and you cannot know that it is affecting you all this time, and then it may be too late, the cancerous disease it induces is absolutely incurable and although giving up ray work may arrest it for a time, yet damage done will not be repaired.

The epithelium of the testes and ovaries can also be affected and sterility produced ; and in London hospitals the nurses are constantly changed so as to minimize this danger and they wear heavy rubber aprons opaque to the rays.

The best method is to place your tube in a lead glass shield, allowing the rays to come out at only one aperture, which is directed on the required area.

In a very long exposure it is well to put a single thickness of linen over the part irradiated, as this absorbs the most virulent rays and will often save a radio dermatitis.

The paper was accompanied by illustrative Roentgenograms and a demonstration of McKenzie Davidson's method of localizing foreign bodies.

Clinical Department.

Cerebral Tumor Simulating a Vascular Lesion. F. G. FINLEY,
M.B. (London), M.D., Assistant Professor of Medicine McGill Uni-
versity, Montreal, in *Montreal Medical Journal*.

The symptoms denoting the presence of a cerebral tumor are usually gradual in onset and progressive in character. Occasional exceptions are, however, observed, and the symptoms if of a sudden origin are usually due to a complicating vascular lesion, either hemorrhage or thrombosis.

The object of the present communication is to call attention to a class of cases beginning with symptoms of hemiplegia or apoplexy which may completely mask the true nature of the malady. The following case is one in point:

Joseph L., aged 47, stonecutter, was admitted to the Montreal General Hospital on April 1st, 1905, and died on May 25th. He complained of headache, weakness of the right arm, and some difficulty in speaking.

He cannot remember any previous illnesses, and denies having had venereal disease. He has smoked heavily, but was always a moderate drinker. His father died of rheumatism, while his mother and two of his children died of tuberculosis. The present illness came on during sleep. He went to bed feeling well and strong, and on the morning of March 15th he noticed weakness in the right arm and difficulty in speech. After keeping at work for eight days he was obliged to stop owing to inability to hold his tools.

Present condition.—The patient is a strongly built and well developed man. There is weakness of the right face and arm and slight difficulty in finding certain words. The gait is normal and the foot is not dragged.

On the right side the face shows flattening of the labio-nasal fold, the movements of the forehead are defective and the eye is not so firmly closed as on the other side. He is unable to whistle, but emotional movements, such as laughing, are equal on both sides. The tongue is distinctly protruded to the right. The right arm can be raised only to the level of the shoulder or slightly above it, the grasp is very weak as are also the muscles of the wrist and elbow. Dynamometer right hand 0, left 40. The motor power in both legs is slightly diminished and apparently equally so. There is an entire absence of rigidity of the limbs, no ataxia and the sense of posture is normal. The knee jerks are slightly increased, especially the right, no ankle clonus. The abdominal and epigastric

reflexes are absent on the right side, the other superficial reflexes are present.

Speech is somewhat defective. He mentions the names of most objects in French, sometimes in English. He can give his name, but not the number of his house. He understands everything that is said to him, but as he has never learned to read or write it is impossible to investigate his powers along these lines. Apart from emphysema the other organs are normal. The pulse during the first three days varied from 56 to 88, the temperature during the same period 96.8 to 98.6, the urine is normal, and at no time did it contain albumen or sugar.

During the first few days he complained of headache, but this was never severe, and he always slept well. The face and arm became weaker and his mental condition showed progressive deterioration; he became very dull and lethargic with incontinence of urine and feces. Motor aphasia became marked and ultimately he was unable to name any object, although he recognized their use. The leg began to show some weakness whilst ankle clonus and increased knee jerk developed, especially on the right side. The leg eventually became extremely rigid. There were two attacks of irregular convulsive movements of the limbs. The pulse was frequently slow, 52 to 60, later it became increased in frequency. Vomiting was present on two occasions only. He ultimately passed into a comatose state with contracted pupils and rapid respiration, dying ten weeks after the first onset of symptoms. The eyes were examined by Dr. Kerry a month before death; the pupils were equal and active and the eye grounds normal.

Iodide of potash was administered in increasing doses, but had to be discontinued on account of a severe stomatitis which it set up.

Dr. B. D. Gillies, who performed the post mortem examination, has kindly furnished the following report:

Anatomical diagnosis.—Tumor cerebri, patchy sclerosis aorta and coronary arteries; patent foramen ovale; chronic adhesive pleuritis (right); broncho-pneumonia and abscess of the lung (left); chronic congestion of the liver; duodenal ulcer.

The brain, after removal of the dura, showed flattening of the convolutions in the third frontal, ascending frontal and parietal regions of the left hemisphere, also a slight reddening of the cortex over the third left frontal region. The pia was smooth and glistening throughout. The first temporal convolution is compressed by the bulging of the upper boundary of the Sylvian fissure.

On section after hardening the brain, a tumor was found extending from near the anterior end of the Sylvian fissure in the third frontal convolution backwards almost to the posterior end of the sulcus. The growth measured two inches from without in, and two and a quarter inches from before back. The edge is irregular and no definite capsule was evident except at the upper and

anterior end of the tumor in the ascending frontal convolution where it was immediately subcortical. Behind this level it merged with the grey matter of the cortex and came very close to the surface, especially in the tissues forming the roof of the Sylvian fissure. The inner border of the growth was ill-defined and extended in for two inches from its outer edge.

Several small dark brown hemorrhagic areas were scattered through the growth. Microscopically, the growth proved to be a spindle-celled sarcoma.

The diagnosis on admission seemed to lie between hemorrhage and syphilitic softening, the former being regarded as more probable. With the progress of the case neither of these hypotheses seemed quite satisfactory, but it seemed possible that a progressive specific arteritis with extending thrombosis of the vessels might account for the increasing paralysis and deepening torpor and lethargy.

The usual symptoms of cerebral tumor were absent. Headache, although present for a short time, was never severe or persistent; vomiting only occurred on two occasions, and optic neuritis was absent a month before death. Had more weight been laid on the gradually increasing stupor, on the slow development of paralysis and spasm in the leg and on the two convulsions, a more correct opinion might have been reached; the sudden onset, however, was so strongly in favor of a vascular origin that these symptoms did not secure sufficient consideration.

The localization of the lesion offered less difficulty than its pathological character. A cortical condition was improbable owing to the absence of early Jacksonian attacks, whilst the fact that the leg escaped paralysis in the earlier stages suggested the subcortical region rather than the internal capsule as the most probable site.

In the light of the post mortem examination the tumor must have been latent for some time, and the occurrence of hemorrhage into its substance apparently caused sufficient enlargement to involve the motor fibres passing from the centres of the arm and face, thus accounting satisfactorily for the sudden paralytic symptoms.

The clinical course of most instances of cerebral tumor is marked by a slow and progressive advance of the symptoms. The occurrence of hemorrhage or softening in the neighborhood, or even of hemorrhage in the substance of the growth itself, as in this case, is, however, marked by a sudden onset or exacerbation of a symptom. Hemiplegia, accompanied in severe cases by loss of consciousness, ensues in precisely the same fashion as in ordinary form of rupture or occlusion of the cerebral vessels. Where evidence already exists of the presence of a neoplasm, the recognition of such cases is not usually a matter of difficulty. A history of preceding severe head-

ache or the existence of optic neuritis would give the clue to the underlying condition.

The difficulty of recognizing the presence of tumor in cases of sudden onset is greatly enhanced when there is no previous history suggesting coarse disease, or when, from any reason such as unconsciousness, no history is forthcoming. Here the symptoms closely simulate those of ordinary hemorrhage or softening.

Hemorrhage, as might be expected, occurs in the more vascular forms of tumor, particularly in glioma, and may take place in the tumor itself or on the vascular layer at its periphery. In the latter case the extravasation is occasionally large, and may even rupture into and flood the ventricles. Cerebral softening is frequently found at the surface of new growths as the result of pressure, or it may follow occlusion of vessels from pressure or by invasion of the lumen of the vessel by a neoplasm. In the case of syphilomata concurrent disease of the vessels is often found.

The onset of such cases is commonly marked by paralytic symptoms, but in the case of extensive hemorrhage or even of softening, the clinical picture may be that of apoplexy. Hughlings Jackson records an instance of a patient brought to hospital comatose, in whom the diagnosis of apoplexy was made. The autopsy revealed a hemorrhage into the lateral ventricles originating from an adjacent tumor. A parallel instance is related by Martin, in which the terminal symptoms were due to softening. The patient, after being confined in an asylum for some years, became rapidly unconscious, there was a doubtful paralysis of the right side and the right pupil was dilated. The autopsy revealed a tumor the size of a hen's egg in the right hemisphere, forming the roof and part of the outer wall of the ventricle and pressing on the optic thalamus. There was softening of the basal ganglia and of part of the right hemisphere. West and Banks have recorded somewhat similar instances.

Bouveret, in recording two cases of sudden onset of paralysis in cerebral tumor, associated in one case with hemorrhage, in the other with softening, remarks on the recurrent character of the attack, within a period of a few days or weeks. Although such a course is not unknown in ordinary hemiplegi, it is certainly unusual to find the attack following another at such short intervals, and this writer is apparently inclined to regard such occurrences as suggestive of latent tumor.

That paralysis of sudden onset in cases of cerebral tumor is not invariably due to vascular lesion is shown by two cases recorded by Gowers. Post mortem examination failed to reveal any indication of hemorrhage or softening in either of these instances. Gowers suggests that inhibition of the motor area is responsible for symptoms, and he regards them as analogous to the sudden occurrence of a convulsion during the course of the disease.

The occurrence of hemorrhage or softening associated with cerebral tumor must be regarded as a grave symptom. Should the patient survive the immediate effects of the attack, recurrence as shown by Bouveret's cases is apt to take place. The fatal issue is frequently precipitated by either of these accidents, and of the cases above referred to all proved fatal within a period of ten weeks.

Proceedings of Societies.

BRITISH COLUMBIA MEDICAL ASSOCIATION.

The seventh annual meeting of the British Columbia Medical Association was convened in New Westminster, B.C., on August 1st and 2nd, and was one of the best attended and most successful in the annals of the association.

The meeting was called to order at 2 p.m. on Wednesday, August 1st, the President, Dr. Geo. Drew, of New Westminster, in the chair. After routine business had been disposed of, Dr. Jos. B. Eagleson and Dr. C. A. Smith, both of Seattle, were introduced to the meeting and welcomed by the President. The President then delivered a very interesting and able address, touching upon some historical reminiscences in connection with New Westminster's association with the first legislation relative to the practice of medicine in British Columbia, in the days when this city was the capital of the colony, and afterwards dwelling on the subject of medical ethics. In the afternoon the association visited the Provincial Hospital for the Insane, which is situated in New Westminster, and after inspecting the institution, with which all expressed themselves as much pleased, they were entertained in the beautiful grounds of the hospital at a garden party by Dr. C. E. Doherty, the Medical Superintendent, and Miss Doherty, about two hundred being present.

The matter of the proposed reduction, by several American life insurance companies, of the fee for examination for life insurance was discussed very fully, and a resolution was passed whereby the members of this association pledged themselves to accept five dollars as the minimum fee for this work.

The question of Patent and Proprietary Medicines also received considerable attention, when the following resolutions were passed unanimously:

Whereas it is morally incumbent upon every medical man to protect the public against disease and sickness as far as possible; and

Whereas, the so-called patent medicines are sold without re-

striction throughout this Province, thereby constituting a menace to the public health ; and

Whereas proprietary medicines, the composition of which are not known, are prescribed by regular physicians to a certain extent ; therefore be it

Resolved, that the British Columbia Medical Association place itself on record as being in favor of the enactment of suitable laws for the protection of the public against patent medicines ; and

Resolved, that it appoint a committee, whose duties it shall be to institute such measures, or support them if introduced by our legislators ; and

Resolved, that it strongly disapproves of the unscientific and possibly dangerous practice of prescribing the secret proprietary medicines ; and

Resolved, that the British Columbia Medical Council be requested to communicate with all physicians of the Province, drawing their attention to the undesirability of prescribing these secret proprietary medicines.

Dr. Hart, of Victoria ; Drs. Wm. Stebben and McTavish, of Vancouver ; Dr. O. Morris, of Vernon ; and Dr. Walker, of New Westminster, were appointed a special committee to carry the above into effect.

The number of papers presented was largely in excess of any previous year, and the discussions following each were most instructive.

The officers for the ensuing year are as follows: President, Dr. R. L. Fraser, Victoria ; Vice-President, Dr. J. M. Pearson, Vancouver ; Treasurer, Dr. J. D. Helmcken, Victoria ; Secretary, Dr. R. Eden Walker, New Westminster. Victoria was selected as the next place of meeting.

R. EDEN WALKER, *Secretary*.

A TENDER, painful swelling just at or beyond the upper, outer border of the breast, and near the edge of the pectoralis major, is usually an inflamed lymphatic gland. In its presence it is well to look for some skin infection about the waist line, *e.g.*, furuncles, which are not rare at this site as a result of irritation by the corset. *Per contra*, with a boil, abscess, dermatitis or other infection at or above the waist line, one may be on the lookout for glandular enlargement at the point referred to.—*Am. Jour. of Surg.*

IN all operations in the left subclavian triangle of the neck, the location there of the thoracic duct must not be forgotten.—*Am. Jour. of Surg.*

Physician's Library.

Messrs. W. B. Saunders Company announce for publication in the early fall the following excellent and practical works:

- "Keen's Surgery: Its Principles and Practice" (Volume I.)
- "Sobotta and McMurrich's Human Anatomy" (Volume III.)
- "Webster's Text-Book of Gynecology."
- "Hill's Histology and Organography."
- "McConnell's Pathology."
- "Morrow's Immediate Care of the Injured."
- "Stevenson's Photoscopy" (Retinoscopy and Skiascopy).
- "Preiswerk and Warren's Atlas of Dentistry."
- "Goepf's State Board Questions and Answers."
- "Lusk's Elements of Nutrition."

The most notable announcement is the new work on surgery, edited by Dr. W. W. Keen, complete in five octavo volumes, and containing over 1,500 original illustrations. The entire work is written by the leaders of modern surgery—men whose names are inseparably associated with the subjects upon which they have written. Without question, "Keen's Surgery" will represent the best surgical practice of to-day.

"A Compend of Operative Gynecology."

This is a practical handbook for students, and has been based on lectures by Wm. Seaman Bainbridge, M.D., at the New York Post-Graduate Medical School and Hospital. His collaborator was Harold D. Meeker, M.D., of the same institution. New York: The Grafton Press.

"Lectures on Midwifery for Midwives." By A. B. CALDER, M.B., M.R.C.S. Price, \$1.50. London: Baillière, Tindall & Cox. Toronto: J. A. Carveth & Co.

In this country, it may be said, the status of the midwife is not the same as in Great Britain. Here the midwife is chiefly met with in the rural districts, and her claim to qualification is apt to rest on two facts—first, she has had several children herself, and is therefore "experienced;" and second, she is in need of employment of some kind, and naturally takes to that form in which she may be said to have "specialized"—in her own way. To such a person this excellent little work might be of some assistance, but it is just possible such a subject as placenta previa would prove a hopeless stumbling block to her. To those who are qualifying in hospitals to become professional nurses the work will doubtless

be of great value. Also to that ever-increasing class, the intelligent young mother, it might prove useful; but again, on second thought, a little knowledge might be a dangerous thing, and the reading about dangerous complications only serve to perhaps needlessly alarm her.

“Uric Acid—The Metabolism in Gout.” By FRANCIS H. MCCRUDDEN, of the Laboratory of Physiological Chemistry of Harvard Medical School. New York: Paul B. Hocker, 69 East 59th Street.

This treats of the chemistry, physiology and pathology of uric acid and the physiologically important purin bodies. Then there is a discussion on the metabolism in gout. The book is a valuable contribution to a complex subject.

“Phlebitis and Thrombosis.” The Hunterian Lectures, delivered before the Royal College of Surgeons of England. By WARINGTON HOWARD, F.R.C.S. Price, \$1.50. London: Baillière, Tindall & Cox. Toronto: J. A. Carveth & Co.

A series of three lectures dealing with the subject in a rather exhaustive and thoroughly satisfactory manner.

“International Clinics.” Vol. II. Sixteenth series. 1906.

This volume of this justly celebrated work is a very fine and valuable production. The illustrations are especially good, there being two colored plates, and many other plates and diagrammatic figures. No one can afford to be without these quarterly productions of up-to-date medicine.

“The Health: Care of the Baby.” By LOUIS FISCHER, M.D., New York, is a small practical handbook for mothers and nurses. It is published by Funk & Wagnalls Company, New York and London. Dr. Fischer, of course, handles the matter contained therein in a clear and competent manner.

The second annual report of the Henry Phipps Institute for the Study, Treatment and Prevention of Tuberculosis is a rather bulky paper volume of 452 pages. It contains a great deal of information on this subject, and what has been accomplished within the year 1904.

The American Roentgen Ray Society report for 1905 is received. It is a neat volume of the transactions of this society.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only \$2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVII.

TORONTO, SEPTEMBER, 1906.

No. 3.

COMMENT FROM MONTH TO MONTH.

Clean milk commands a widespread and intense interest. Farmers, dairymen, creamerymen, retail dealers, consumers and babies are all concerned in its handling from the cow to the infant. The latter is the most concerned, but incapable of protecting itself. Others must do it for it. The subject forces itself home more particularly to the parents of the infant, and to physicians who are called to attend infants afflicted with disorders of digestion, especially in the summer months. It is, therefore, because of the limited agitation that the question of clean milk is a spasmodic one. After September and prior to the following June, it is practically a closed book. A campaign, therefore, in order to be successful, should be continuous all the year round.

There are then a great many classes to be educated, and there is a commercial as well as a professional, and as there certainly is a humanitarian aspect to it; the right and proper handling is an important element in the enormous saving of child life, to say

nothing of the product as a clean food of everyday consumption. Producers, the farmers and the dairymen, must be taught to faithfully and intelligently collect milk, so far as it is possible to do it, in an aseptic manner. By simply following the ordinary rules of cleanliness much can be done in this direction, and where milk is collected for distribution in large centres, especially in cities, the collection of it, as well as the surroundings from which it is derived, should positively be under the inspection of the board of health most and directly concerned.

The retail dealers should also be closely looked after by inspectors appointed by the authority of the local board of health, and it should be made incumbent on them to supply to all their customers, without distinction, at stated periods all the year round, bi-monthly or quarterly, circulars, of rules not too elaborate, for the care of milk after it leaves their hands, and how it is to be fed to babies, especially in the months of highest temperature. These circulars should, of course, be framed by the local board of health. The retail dealers simply act as distributing agents of them.

Where this subject has been attacked in a consistent and continuous way, the incidence of diarrhoeal diseases and the resultant loss of life in infants has shown a markedly great subsidence. In the State of New Jersey, where powerful influences have been at work for the past nine years, this fact is strikingly marked, and presents an object lesson which the simplest can appreciate. In that State the deaths occurring in children under five years of age per 100,000 of the population were, in 1896, 561.1. By degrees the descent has been gradual until in 1905 the rate stood at 460.0. When, however, you come to inspect the statistics of the decade prior to 1896, the vast decrease is more strikingly brought home to us, for at that time the rates ran into the six, seven, and eight hundreds. These good results may be credited chiefly to the attention the milk received after being delivered to the consumer, and here the board of health seems to have massed its forces. But all along the line, from the teat of the cow to the palate of the infant, this prime and essential food should be rigidly guarded from outside infection.

At the door of the milk question, however, must not be laid the charge that it is responsible for all the disorders of digestion in infancy, for it is not the case. The unwise and promiscuous manner in which many people feed fruits, uncooked, to their children, must lay claim to some of it. The habit of displaying fruits in shop windows and even on the sidewalks, is a foolhardy and unwholesome one so far as the consumer is concerned, though it may be good business from the standpoint of the shopman. It is scarcely necessary to call attention to the dust from the adjacent thoroughfare which collects upon these, nor to the innocent, though mayhap sometimes harmful, handling of them. The fact remains, that a goodly part of it, peaches, plums, pears, grapes, etc., is eaten *holus holus*, without even a perfunctory essay at cleanliness. Who will tell of the countless thousands of germs thus introduced inside the human economy, to say nothing of the carelessness as to whether the child does or does not actually consume considerable portions of decayed fruit? It would seem well for fruit to be displayed from glass cases.

While on the subject of clean and wholesome foods, a word might be said about the handling of the staff of life—bread. Why should bread be delivered as it now is by the same hands of a driver who may have to do with handling his horse? Bread should be delivered in paper bags or boxes.

A great many think confectionery is harmful to children, so it is if abused; but the growing child's economy demands a certain amount of sugar. Confectionery is not harmful if not given to excess, and a good quality be chosen. It should never be given within an hour of meal time, as it destroys the appetite for ordinary, which is generally nutritious, food. Confectionery is not harmful to teeth, unless allowed to remain in small portions in and about them; even then the saliva soon dissolves the sugar. The teeth of children, as with adults, are mostly destroyed through neglect to clean them properly and regularly.

It is comforting to know that Canadian confectionery is wholesome and harmless, that is so far as the highly colored varieties go. Bulletin No. 112, Inland Revenue Department, Ottawa, deals with

the results of examining 111 samples of highly colored confectionery collected in different sections of Canada. The examinations were undertaken to ascertain if they contained any mineral impurities such as lead and arsenic. In only one sample was the presence of arsenic demonstrated, but in such inappreciable quantities, that it would act more as a tonic than as a poison. Thus does Canadian confectionery receive endorsement from the analytical chemists in the employ of the Federal Government.

The great British Medical Association meeting in Toronto is over. It was one of the largest meetings of its character ever held in America and surpassed anything ever before held in Canada. No doubt it will be far-reaching in its influence. Many men came to it who had never before attended a medical meeting of either a national or provincial character. To them it must have proved a revelation to see so many medical men gathered together into one conference. In this respect it will exert a stimulating influence in the direction of both the Canadian and Ontario Medical Associations, as well as other provincial associations. Many men will see the advantages to be derived from friendly conference every year, and the result will be that the national organization, the Canadian Medical Association, will be better attended and supported. On the evening of the first day it was stated that already 800 Canadians had registered. If eight hundred Canadians can turn out to the British Medical Association in this country, they can surely do the same for our own national organization. The meeting also will exert an influence in the direction of reorganization of the Canadian Medical Association with its provincial, county and city branches. Let the influence proceed in the right direction. Let us properly organize ourselves before seeking to organize additional branches of the British Medical Association in Canada.

News Items.

THE death rate in Montreal during 1904 was 20.6 per 1,000 of the population.

FOR nineteen years the average birth-rate in Montreal has been 37.92 per 1,000.

KINGSTON GENERAL HOSPITAL is again talking of having a medical man for superintendent.

DR. A. K. MCLEAN, of Chicago, a graduate of Toronto University, died recently in Battleford.

DR. R. B. HARRIS, late of Toronto, has purchased the practice of Dr. J. McCulloch, Blackstock, Ont.

DR. LEO KILLORAN, of Seaforth, has been appointed official anesthetist of St. Michael's Hospital, Toronto.

DR. CHAS. F. MARTIN, Montreal, has been appointed chief medical officer for Canada of the Standard Life Assurance Co., to succeed the late Dr. Craik.

DR. G. H. WADE, of Wooler, was elected High Chief Ranger for the ensuing year at the meeting of the High Court of Eastern Ontario Independent Order of Foresters, held at Brockville.

MCGILL UNIVERSITY, Montreal, will confer the degree of LL.D., *honoris causa*, upon Sir Thomas Barlow, Sir William Broadbent, Sir Victor Horsley and Dr. T. Clifford Allbutt. The degrees will probably be presented at the next convocation *in absentia*.

DR. W. H. LOWRY, JR., who has been for a year and more on the staff of the Midland Eye and Ear Hospital at Birmingham, Eng., is now holidaying in Switzerland, preparatory to taking an appointment in the fall on the staff of the Sick Children's Hospital, Toronto.

DR. D. F. H. SCOTT, son of Principal Wm. Scott of the Toronto Normal School, who has been abroad for the past two years, has been awarded one of the two Royal Society research studentships of £150, at the University of London. Dr. Scott is a graduate of Toronto University and served as a demonstrator in physiology at Varsity before going away.

DR. WM. J. BELL, who is now located in North Bay to engage in his profession, graduated in Toronto in 1902. He was associated six months as clinical assistant to Dr. McPhedran, Toronto, and was for two years surgeon in employ of C.P.R. Empress Line to Japan and China. He took six months' post graduate study at London Hospital, Whitechapel, London, England.

Science Notes.

The Influence of Increased Barometric Pressure on the Human Body.

A series of interesting experiments for determining the influence of the varying atmospheric pressures upon the human system have been carried out by two English scientists, Mr. Leonard Hill, F.R.S., and Mr. M. Greenwood, Jr., M.R.C.S., under the auspices of the Royal Society of Great Britain. These experiments are of particular importance owing to recent extensive engineering works which depend largely on caisson working and deep-sea diving. During the past few years numbers of mechanics employed in caisson operations have developed symptoms of paralysis of the muscles after prolonged immersion in the working area at abnormal atmospheric pressure, and to this malady the term "caisson disease" has been applied. It was with the object of ascertaining the cause of this complaint, and also with the purpose of determining the greatest depth at which a diver can work with safety, that Messrs. Hill and Greenwood conducted their investigations.

From the results of previous experiments carried out by Mr. Hill upon animals, he discovered that every 100 cubic centimeters of blood or tissue fluid dissolved at body temperature about 1 cubic centimeter of nitrogen under one atmosphere of air, 2 cubic centimeters under two atmospheres, and so on. When the decomposition period is accelerated, the nitrogen is set free as bubbles in the capillaries and tissue spaces, and by the resultant embolism of some vessel in the body, symptoms varying in nature and intensity are liable to be produced. The usual working shifts of caisson mechanics range from two to four hours, and in this time the body fluids of the men become saturated with nitrogen.

Mr. Hill ascertained that no ill effects were experienced by animals when exposed to pressures up to seven atmospheres, provided a period of 20 minutes was allowed to each atmosphere for decompression. He thereupon resolved to ascertain personally the effects produced upon the human system under varying pressures. The apparatus employed by Hill and Greenwood consisted of a large steel cylinder of 42.2 cubic feet capacity fitted with a mattress, blanket, and pillows, upon which the

subject could recline in a comfortable position. The interior was electrically illumined, and by means of the telephone and electric bell the subject was able to communicate with his companion outside. A two-cylinder motor-driven pump was used for compressing the air, and this was capable of raising the air pressure within the cylinder to six atmospheres in approximately 40 minutes. There were two decompression pipes with taps of fine bore, so that the rate of escape could be very finely adjusted. In order to avoid any accumulation of carbon dioxide gas, a constant ventilation was maintained.

In one of the tests Mr. Greenwood, upon emerging from the chamber, experienced itching in both fore-arms, more especially in the right. At first the pains were light, but after a lapse of about 20 minutes they increased, becoming neuralgic in character. After remaining moderately intense for five minutes, they gradually subsided. Later investigations indicated that the pains were due to the fact that the subject remained practically motionless during the period of decompression.

In the course of the investigations pressures ranging up to 92 pounds were attained. In no instance were any severe after-effects experienced. A pressure of 90 pounds is equivalent to a water depth of 210 feet, which is some 90 feet in excess of the safety limit fixed by the British Admiralty for divers. It is thus evident that an adult may be safely submitted to a total barometric pressure of seven atmospheres. Even a greater depth than 210 feet might be attained, since the limit appears to be fixed by the pressure at which the toxic effects of high-tension oxygen become an immediate danger. These toxic effects have been closely studied by several scientists. When the partial pressure of oxygen reaches two atmospheres, corresponding to ten atmospheres of air, or a depth of 350 feet in water, convulsions may occur in animals within 20 minutes. It is possible that this limit may be extended by diluting the air with nitrogen, but upon this point the investigators do not claim to afford any testimony. However, the results of their practical observations show that the diving depth may be safely increased up to 210 feet.

The observers prepared a careful record of the various sensations they experienced under pressure. The feeling of discomfort in the ears, due to a different air pressure on opposite sides of the tympanum, is well known. Previous to the experiments Mr. Hill had not practised the opening of the Eustachian tubes, and the effect of the test was most disturbing

When, however, the method of opening these tubes had been explained to him, he experienced no further trouble. The power of hearing appeared to be much more acute when the subject was under pressure. The signal of a tap with a spanner upon the outside of the cylinder was heard with painful intensity. The change in the voice which is so well known among caisson workers was well marked during these trials. The voice assumed a peculiar nasal and metallic quality, and the individual characteristic tones were lost. At three atmospheres the power to whisper or whistle was almost entirely lost, and this loss of the vibratile movements of the tongue and lips was a result due probably to the damping effects of the dense air. One of the most important results obtained by these experiments is the imperative necessity of moving every muscle and joint in the body during the period of decompression and this for the purpose of keeping the capillary circulation active in every part. In the brain, spinal cord, and abdominal organs, this circulation is kept active by the work of the respiratory pump. In the limbs, muscles, fat of the back and chest, the movement of the blood and lymph back to the heart depends mostly on changes of posture and the expressive action of contracting muscles. In one test Mr. Greenwood was decompressed from 75 pounds in 95 minutes, and during this period he fixed and extended all the limb joints at frequent intervals, with the exception of the knees. A little while after leaving the chamber no pains or stiffness were felt, except in the knees, which had not been exercised. In another test Mr. Hill was decompressed from five atmospheres in 105 minutes, a pause of five minutes being made at each atmosphere. During the decompression the muscles of the limbs and back were regularly moved, and the only part of the body which the subject omitted to move and massage was the front of the chest. In the evening of the day of the experiment painful places were felt in this region, and a peculiar purplish rash appeared. Forty-eight hours after the test this rash was still discernible. The opinion of the investigators on this point is that the rash was attributable to small bubbles embolizing the vessels of the subcutaneous fat, while in the case of Mr. Greenwood the pain experienced was probably caused by small bubbles in the nerve sheaths in the first case, and in the knee joint in the second instance. The imperative necessity for active movement during decompression is thus shown, and caisson workers should be instructed to freely exercise and massage every part of the body while undergoing decompression in the air lock.—*Scientific American*.

Wanted: Brains to Dissect.

It may not be generally known that all over the civilized world there is a strong demand for brains that are a little above the average in quality; not intelligence, or intellect, or genius, but, literally, that part of the human organism which is contained within the skull and is known as the brain.

Scientists who devote themselves to the study of comparative anatomy have for the most part nothing better to dissect than the brains of paupers and lunatics. These, however, leave much to be desired, and it is to the interest of the human family that the brains of cultured and learned people should be placed at the disposal of those patient and laborious men who are engaged in the vastly important work of unraveling the secrets of the working of the mind.

But it must not be supposed that a certain number of such brains are not forthcoming. Comparatively speaking, there are few, but, still, more numerous than most people imagine. In the great majority of cases they are bequeathed by their respective owners. On one occasion Sir William Fowler, the famous authority on comparative anatomy, in addressing an audience of cultured men and women, spoke of the difficulties he and his fellow workers had to contend with in having little else than the brains of people of low intellect to dissect, and went so far as to appeal to the audience to help science in this matter in the only possible way. On the conclusion of his address several members of the audience, including a few ladies, promised to bequeath their brains to him, and, it is said, proved as good as their word. More than one man of great eminence has regarded it as something in the nature of a duty to do this in the interest of science. Prof. Goldwin Smith, for instance, some time ago formally willed his brain to Cornell University.

Some remarkable brains have been sold, not given. An Englishman who calls himself Datas has disposed of his to an American university for \$10,000. He is a man of little education, and for many years worked as a coal miner. But he has a marvellous memory, especially for dates, and is now earning a handsome income on the music-hall stage. Any member of the audience may ask him the date of some occurrence, and is answered instantly. It is considered that his brain must show some very unusual development, and there was not a little bidding to secure it after death.

It stands to reason that the brain of a man of intellect offers a much richer field for observation than the brain of a pauper or some other human derelict. The brains of great men vary very much; more, in fact, than do those of nonentities. It is found that men of encyclopedic mind have large and heavy brains—

Gladstone had to wear a very big hat—with an enormous bed of gray matter and numerous convolutions: on the other hand, men whose genius is concentrated upon one line of thought are of small brain and, consequently, have a small head. Newton, Byron, and Cromwell belonged to this class, and each had a small head. Yet many people imagine that this is a sign of small mental capacity. A visitor who was shown the skull of Cromwell was so disappointed at its size, that the caretaker of the relic endeavoured to console him by saying that this was the skull of the great Roundhead when he was a boy. Prof. Symes-Thompson told this anecdote in a recent lecture, and he also mentioned that Newton was so small when born that he could be put inside a quart pot.—CHARLES STIRRUP, in the *Scientific American*.

DO NOT advise extirpation of large glands in any particular region without making sure that they are not the early manifestations of leukemia or Hodgkin's disease.—*Am. Jour. of Surg.*

IN performing posterior gastro-enterostomy see that the opening in the transverse mesocolon is not so narrow that it may constrict the anastomosed segment of small intestine nor yet so large that it may permit of a possible hernia into the lesser sac. By inserting a number of sutures between the mesocolon and the stomach wall about the anastomosis these possibilities may, in large part, be obviated.—*Am. Jour. of Surg.*

THE pain in the lower part of the back that is frequently complained of after operation, can be best relieved by placing a small pillow in the hollow of the spine.—*Am. Jour. of Surg.*

IF, after a period of post-operative catheterization, the patient finds herself unable to pass urine spontaneously, apply hot towels to the vulva.—*Am. Jour. of Surg.*

WOVEN catheters may be sterilized by boiling in saturated ammonium sulphate solution. Catheters and bougies may be kept aseptic if they are wrapped in gauze wet with soap-spirits of the German pharmacopeia.—*Am. Jour. of Surg.*

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVII.

TORONTO, OCTOBER, 1906.

No. 4.

Original Articles.

PRESIDENT'S ADDRESS.*

BY RICHARD ANDREWS REEVE, B.A., M.D., LL.D.

Dean of the Medical Faculty of the University of Toronto; President of the Association.

I thank you first of all for the honor of the office which I have been called upon to fill. The thought of such a thing never came to me in dreams by day or visions of the night, and, if it had taken shape, it would have flitted from the mind as one scanned through the vista of years the long roll of men of high repute who had sat in this chair. One could not but feel that the success of the Montreal meeting was warrant for this venture. I must avow at the outset that any credit for such success as may attend the second visit of the British Medical Association to Canada—and the prospects are bright—must rest largely upon those who have freely given most valuable help in various ways. One need hardly add that it has been indeed a labor of love to bring from their posts of duty and busy round in the old homeland the select and elect of our profession. We greet and welcome you, not only for your own sakes as men whose names are already household words, or doubtless soon will be, but as worthy sons of worthy sires. For if Bacon, Shakespeare, Newton, Faraday, Kelvin, Clerk, Maxwell, J. J. Thomson, and other lights of literature, science, and philosophy in the British firmament were blotted out, there would only be

*Delivered at the seventy-fourth annual meeting of the British Medical Association.

a partial eclipse, for would not Hunter, Harvey, Sydenham, Jenner, Simpson and Lister present a resplendent galaxy?

Our gathering to-day is in a sense—limited it may be—a cosmopolitan one. International comity has always prevailed in our profession. Disease knows no distinction of country or race, and is the common lot of humanity. In the face of a ubiquitous foe it is natural that mankind should be as a unit in defence, and that the confraternity of the healing art should be undivided. The recognition of English talent and experience on the part of the late Emperor of Germany, and by the British Sovereign in the case of that master of the science and art of bacteriology, Koch, and the action of the United States in calling to its counsels British experts in tropical medicine upon the threatened invasion of yellow fever—these are graceful and forcible proofs in point. And we are glad, in obedience to the unwritten code and by means of this gathering, to cement the tie that already binds the great Anglo-Saxon people and those of the land of professional culture and erudition, France and Germany. Our *confrères* from the United States delight to honor the names of Physick and Rush, Wood and Warren, Biglow and Bowditch, Alonzo Clark, Flint, Weir Mitchell and others; and yet I am sure they are not one whit behind the Briton or Britons here to-day in their respect for the great men of the British school, from Harvey to Lister, who have laid the world under tribute. We in turn delight to honor Laennec, Bichat, Corvisart, Trousseau, Charcot, Pasteur, Langenbeck, Virchow, Billroth and Koch.

The Association, which has just met on this occasion for the second time in its history outside of Great Britain and Ireland, was founded in 1832 in Worcester, and had a membership of 140. It was reorganized in 1856, and took its present name. It has now a membership of 20,000, grouped in many divisions and branches in the old country, and in various parts of Greater Britain. We have with us an honored member from Egypt and one from New Zealand.

The *Journal*, which is published under the aegis of the Association, takes rank as a leading exponent of the thought and researches of the profession and the practice of the healing art. It forms a strong bond of union amongst its members, who rightly value it as a depository of knowledge and a most useful medium for the exchange of opinion and the discussion of live topics that concern the profession and the public. The Editor may well felicitate himself upon the weight of its influence in moulding public opinion, and in safeguarding the in-

terests of the profession. Those who recall the crusades of the anti-vaccinationists and anti-vivisections will agree that the *Journal* is at once a faithful sentinel and a doughty champion.

It would be interesting, did time permit, to trace the growth of this great organization from its early days to its present commanding position. But I must at least call attention to an incident of the first meeting, which explains much of the valuable work done in these years. Steps were taken to secure special studies on anatomy and the chemistry of the animal fluids. The researches on these subjects reported the next year were the first of a long series made under the auspices of the Association, which so far has given of its funds about \$70,000 to meet in part the expense involved. This feature of the Association's work forms a bright chapter in her history, and is in marked contrast to the apathy and lack of support of the Government, whose attitude in this regard has often to so many seemed unintelligible. Nothing seems more certain than that money spent in such a cause yields a thousandfold return or more.

THOUGHTS ON A DECADE IN MEDICINE.

The last decade is more than ten years. We are the heirs of the ages, and though the dead past may and should be buried, the living past with its germs of truth, its seed of thought is in these latter days bearing fruit quietly, it may be, but as surely as the dawn is wont to creep on into day.

The falling of the apple set in motion a train of thought in Newton's mind which led to gravitation, but it was as if just then his mental eye had been lit up by a ray which had speed for ages from the source of light. Many years were surely compressed into the decennium in which Lister and Pasteur, Koch, Metchnikoff and Behring, with genius and untiring energy in quest of truth, solved their mighty problems and gave the world such talismanic words as antiseptis, asepsis, immunity and serumtherapy.

The work of Pasteur, Lister, Koch and others proved not only a vast boon to man and beast, but a grand object lesson to mankind, and recent years have seen the result in princely gifts in the interests of science and humanity. Scientific medicine cannot fail to profit largely, for medicine as a science does not stand alone: it rests upon biology, physiology, chemistry, physics, psychology, etc.: and the various laboratories that now exist, or are to be in the near future, mark the dawn of even a brighter era, let us hope, than the brilliant epoch of the last

ten or twenty years. There is yet much to be done ere the millennium comes. True, nursing has become a fine art; diphtheria has been largely robbed of its terrors, and, though rampant, is curable; the mortality of typhoid has been reduced one-half; but the fatality of cancer has steadily increased; the white plague stalks through the land, and the death-rate of infants, owing mostly to intestinal troubles, is still very high, and not on the decrease. Indeed, without being pessimistic, one might almost surmise with what surprise old Hippocrates would rise and rub his eyes as he inquired, "What! is there any sickness left, and can you not cure every one yet?" One thing this hoary sage would, perhaps, not know—the masses of mankind require to be protected against themselves. One almost feels as if the hands had gone back on the dial of the world's progress when one recalls that at Jenner's centenary the city where his method of vaccination had come into vogue was in the throes of an epidemic of smallpox due to the ignoring of his great discovery. Public opinion, of course, stands for what men think, or others think of them, and there is yet ample scope for State medicine to ply its persuasive powers until men think aright about matters which affect the well-being of the community, and the presumed welfare of the individual shall not stand against the weal of the masses. Unfortunately, none are so blind as those who will not see. This is too often the crux; and it would seem that in the matter of vaccination people deliberately close their eyes to the plain force of facts, and cherish the delusion, "Better bear the ills we have than fly to others that we know not of." Compulsory vaccination seems to many a harsh and doubtful expedient, but what it has done in Germany it can do the world over; and the dictates of wise prudence and the lessons of ample experience show conclusively that it should be enforced. Here a true paternalism of the State with the active support of the profession should override so-called conscientious scruples. Done under the rules of asepsis, as it always should be, and with the use of pure vaccine, now always to be had, the risk is practically *nil*.

The work of the past decade has given the profession itself some new ideas in regard to the mechanical and the chemical processes of digestion. New laboratory methods by Cannon of Harvard and Pawlow of St. Petersburg have cleared up some moot points. That the stomach is a receptacle and a sort of churn is old news, but that the first part is a mere receptacle, and the other a kind of "mill," which is perforce the more common seat of mischief, requiring surgical treatment, may not be.

Time has but served to emphasize what has now been shown by research the value of thorough mastication and the avoidance of mental states which would divert nervous energy, and interfere with digestion by cutting off the "appetite" juices, as shown by Pawlow's studies.

A notable work embodying the basis of a change of faith and a new practice is that by Chittenden, of Yale, on "Physiological Economy in Nutrition," giving the results of the most exact and elaborate studies. Too much food not only means loss of vitality in the disposal of it, but entails a positive risk from the resulting poisons (toxins) ere these products of metabolism are finally got rid of. Chittenden has shown that one-half or one-third of the nitrogenous (protein) food ordinarily taken suffices, and, of course, with the minimal tax upon liver, kidneys and digestive tract. This economy is, therefore, a real and not a fictitious thing, at once wise and provident. Much of the joy of living depends upon a good digestion, and in these days of wear and tear and carking care the less of useless work to be done because of faulty diet the more of energy to spare for life's duties. Chittenden urges the importance of a fuller knowledge of dietary standards which, as he points out, are "altogether too high." It has been shown by Lauder Brunton, Minkowski, Vaughan, Novy, and others that various nitrogenous waste products, the results of proteid katabolism, as creatin, creatinin, xanthin, adenin, etc., in fact, the various leucomaines, ptomaines, etc., are toxic in their effects. And then as to uric acid, of which we hear so much, whatever its genesis—endogenous, exogenous, or synthetic—or its actual role in the economy, it is safe to say there will be the less formed and requiring excretion the less proteid or nitrogenous food is taken. And though we cannot deny that rheumatism, at least the acute, is due to the agency of a special microbe with its specific toxin, doubtless the congenial soil for its operation may be greatly reduced as just indicated. In this day there should be some boon for the legions of rheumatic subjects, which they are denied. Not so deadly as the white plague, rheumatism causes much more pain and misery in the world than tuberculosis. The question of nutrition concerns all mankind. The right food for infants and adolescents is of more moment than for adults, and the wise physician will not forget that the young are apt to err in ignorance or be sinned against, while older folk are wont to transgress, in spite of light. It will be well when the teachings of the laboratory and college

halls have become common property. They will be then more plain living and high thinking and less repining on the part of the masses on account of their enforced moderation. Whether we will or no, people will try to meet their own need as to food and physic in what they think is the best way. It is the prerogative duty of the profession to show that Nature's laws, rightly interpreted and adopted, are the only safe guide to good living—not men's whims, fads, and fickle appetites or ingrained habits; and that much of the money that goes for patent foods, as well as the millions spent on patent medicines (so-called), are, as a rule, misspent. Thirty-five per cent. of all deaths are under five years. A large proportion of the infants and other very young folk who die would be saved if properly fed. Proper food and hygiene are the hope of future generations. There is a great field for missionary work by the profession.

The furnishing of clean pure milk to communities is one of the greatest boons to humanity of recent years. Pediatric societies in the United States have done good service in this regard through the agency of certificates; and the example is a good one. There are many infants' foods, and, let us hope, not a few of these good ones, but there are some which are not; so-called meat extracts, for example, have little nutritive value. And the need of care is shown by the warning of Sir Thomas Barlow given in 1894, that "condensed milk or even sterilized milk is not an efficient substitute for the natural food of the infant, and that infantile scurvy may be caused by their sole use." And animals have been found to rapidly die when fed on a mixture of all the supposed constituents of milk. There is an "unknown quantity" even here.

The past decade has been marked by an increase in the debt medicine owes to physiology and physiological chemistry, and by a sense of the growing importance of the latter, which, on account of its recognized status and value, is now made a subject of study in the course of medicine. The bio-chemistry of the cell and its nucleus goes on apace, and many of the proteids can now be prepared in a purely crystalline form, showing the great complexity of the living protoplasmic molecule. I may be pardoned for saying that it would be strange indeed if the rightful relation of physiology and physiological chemistry to medicine were ignored, when the head of the department had done pioneer work of high order in this line. As Prof. Newell Martin, of honored memory, long ago pointed out, "three great advances in medical thought were due to researches in

physiology and biology, that (a) disease is the result of a change in the structure of one or more material constituents of the body leading to normal action; (b) the establishing of the cell doctrine, that each one of us is made up of millions of little living units"—each cell with its own properties and processes in health and disease—the basis of the epoch-making "cellular pathology" of Virchow; and "(c) the germ theory as to the causation of an important group of diseases. To the last we owe already antiseptic surgery and the development of bacteriology and its practical bearing." He adds that "though inflammation is the commonest and one of the longest-studied pathological states, we really knew nothing about it before the experimental researches of Lister, Virchow, and Cohnheim, and that all we really know about fever is built on similar researches of Claude Bernard." The value of physiology to medicine is shown in another light by a remark of Ludwig: "It is remarkable that a great proportion of all the physiological work of Great Britain has been done by men who have become successful hospital physicians and surgeons." We have proof that this very proper sequence has been kept up, in the person of one who is with us to-day and who had gained well-earned repute by his researches in physiology ere he had won his spurs as one of the leading surgeons of the day, respected on both sides of the Atlantic, Sir Victor Horsley. Professor Osler, to whom the remark quoted was made, is an apt illustration on the other hand, of a physician of the highest repute who first made his mark as a physiologist. So much to point a moral. Twenty years ago the cry was raised that there was too much science and not enough of professional training in the medical course: I doubt if that voices the sentiment to-day. Is there not good ground for the belief that the time spent at science as taught now should prove of peculiar and lasting value, that it gives the medico an abiding zest because he has a training and a grasp which keep him in touch with the scientific side of medicine and put him on a higher plane through life?

So-called empiricism had its day and it is, in fact, not yet over, and no one can deny that with but little more than their five natural senses and the use of their wits, our forefathers in the profession gave the race in their time good service. And none to-day are more ready to pay their tribute than those whose researches and experiments, and whose good fortune it is to have many instruments of precision, give them right to speak with authority. *Pari passu* with the growth of more

exact knowledge of the causes and nature of disease has come, perforce, from the studies which have led to it, more faith in the native powers of the human body and in the value of the aid which can be given by nursing, dieting, etc. Perhaps this is why one who is the peer of any in the science of medicine should stay his hand when he comes to the art thereof and tell us that "the advanced school of the present values a few well-tried medicines and certain of quality and action as highly as ever; and, again, the modern treatment of disease relies very greatly on the old so-called 'natural' methods, diet and exercise, bathing and massage." It would seem, therefore, that practical medicine in so far as drugs are used has not quite kept pace with the knowledge of the causes and processes of disease. *Per contra*, serums are drugs, and one of them alone, the diphtheria antitoxin, has wrought a magic not seen since the days of the Great Healer himself. But to get the best results later studies have shown the importance of early resort to it, for it is only the free toxins that can be reached. It is now found also that much larger doses should be used; they are much more effective and are innocuous, and not age but severity should regulate the dose.

That pneumonia is always a septicemia and its specific microbe always present in the blood, gives the clue to its prevalence and high mortality, greater indeed than of yore, doubtless owing to the large and increasing percentage of dwellers in cities and towns. A protective and curative serum or "vaccine," as in the case of diphtheria or typhoid, is the hoped-for remedy. The discovery of a specific microbe in cerebro-spinal meningitis, which now and again becomes epidemic and creates havoc, and of the mode of entrance of the infection by the nose and throat, and of the trial of repeated lumbar punctures and injections of diphtheria antitoxin, with uncertain results, are features of interest in this serious malady, which, by the way, is not at all as fatal as some suppose. The occurrence of two great wars recently has given added interest to the study of the causes and course of treatment of the various diseases, especially typhoid fever, which have prevailed amongst troops in former campaigns. In the Spanish war typhoid became epidemic in camps in both Northern and Southern States. "Infected water was not an important factor in the spread of typhoid fever in the national encampments of 1898," and, again, flies were unquestionably carriers of infection—a fact of primary importance owing to some features of camp-life.

Bacilluria has been cut short by urotropin.

A variety of fever, paratyphoid, has been separated from the small group of typhoid infections simply because of the presence of a specific bacillus (not the Eberth), for, clinically, the two are identical. Here we find another example of the role of bacteriology in fixing the identity of disease.

Of very great interest bacteriologically, and of far-reaching import therapeutically, is the discovery by Wright and Douglass of the substances in the blood fluids called opsonins, which prepare the microbes for ingestion, and digestion by the leucocytes (phagocytes), and that the serum acts upon the microbes, that is, is bacteriotrophic, and not upon the leucocytes, bactericidal. By an ingenious comparative test Sir A. E. Wright gets what he terms the "opsonic index," and by the "vaccine," which is prepared from cultures of the typhoid bacilli sterilized by heating for ten or fifteen minutes at 60° C., and which is injected internally, secures at least a modified immunity, which may persist for at least two years. This method has been tried on a large scale on British troops in India and South Africa, and after a careful study of the results has been commended by the Secretary of State for War. As Trudeau says, "Sir A. E. Wright has made a brilliant contribution to our knowledge of the mechanism of artificial immunization, and a striking attempt at the practical application of exact laboratory methods to the treatment of disease."

A most interesting if not fascinating chapter in the history of modern medicine is that of the role of protozoal parasites of the blood as the cause of specific fevers; and to the members of the Association now enlisted in the Schools of Tropical Medicine of Liverpool and London is the credit largely due for the very important and most valuable results already accruing.

Major Ronald Ross's discovery that malaria is conveyed by mosquitoes, which act as an intermediate host, has not only led to successful measures to practically eradicate malaria with its attendant evils, but has given the clue to the cause of yellow fever and its treatment, etc. The first positive proof that the *Stegomyia* was the carrier of the infecting agent of yellow fever was given when Carroll, in July, 1900, offered himself for a test experiment with a self-sacrifice worthy of all praise. He had a very narrow escape, but Lazear, of the American Commission, and Myers, of Liverpool, lost their lives. That the labors and sad deaths of these heroic men were not in vain is amply attested by the remarkable vigor and success with which

the recent plague was stamped out, and the exemption secured by Havana and other pest centres.

Preventive medicine as the result of this decade's work alone gives sure promise of saving lives and sparing more misery than could universal peace. Indeed, to give effect to its benign

It is clear gain in any department of knowledge carefully sway is worthy the highest ambition of the greatest statesmen. to collect the facts or data and correctly group them. This requires a philosophic insight which dips far beneath the surface and searches out the origin and hidden relations of things.

Here one must congratulate Professor Adami upon the framework of his devising in which rests a system that "is an ingenious combination of the strictly embryological and histogenetic principles of classification." Each term employed implies not only the general histological characters of the tumor but also its origin from the germinal lays.

Adami sums up the state of our knowledge in regard to the all-important subject of inflammation:

1. In addition to the well-known role of leucocytes in ingestion and digestion of bacteria (Metchnikoff) there are substances which prepare the leucocytes for their work—for example, opsonins (Wright). Bacteria may also undergo destruction without phagocytosis. Here the bacteriolytic substance (cytase) acts upon the death and breaking up of cells that are potentially phagocytic. It, however, cannot act without the intervention of a second intermediary body (fixateur) present in the medium.

2. Certain leucocytes secrete and discharge substances which, if not directly bacteriolytic, are preparatory and essential for the destruction of the bacteria. In all organic enzyme action for the development of the complete cycle at least three factors are requisite. Enzyme action may arise in a series of different chemical compositions.

Since our meeting in 1897 bacteriologists have added to the list of microbic diseases, and it now stands (a) Diseases due to animal parasites, namely, malaria, yellow fever, relapsing fever, trypanosomiasis, and "Texas" fever. (b) Those due to variolous bacteria—typhoid, tuberculosis, tetanus, plague, cholera, elephantiasis, leprosy, anthrax and pus infection.

SURGERY.

Cast-iron rules in medicine and surgery, save as to a few cardinal principles, are not in order, and, therefore, one of the questions of surgery, and it is often *the* question, namely, when

to operate, still remains a moot point for the family physician and the surgeon. Some years ago at the Congress in Washington the physicians took the aggressive in regard to appendicitis, while the surgeons rather favored caution. Now, one might say, the attitude is reversed. More than ever, possibly, is it held that the surgeon must be much more than a surgeon. Manual deftness, operative dexterity *per se*, should be no passport to fame. The processes of disease and the effects of injuries often need most careful study and a deep insight into the relation of things ere action be taken. Some years ago the elder Chiene of Edinburgh, as guest of the American surgeons, struck the keynote of modern surgery, in one of its aspects, when he told us that his clinical laboratory was the first essential in his armamentarium. Surgeons are now studying the blood and counting the white corpuscles to get the clue they require, and also test the fluid taken from around the spinal cord similarly (lumbar puncture).

Putnam, of Boston, holds that the surgery of the brain and spinal cord at least should be done preferably, if not only, by men who are well versed in physiology as it is now known.

Not to weary you with details, surgery is now invading, if possible, more vital spots, as, for example, the heart. Indeed, our respected friend, Sir Victor, gets down very close to the medulla oblongata; but, then, he is a physiologist.

The x-ray, owing to improved mechanism and increased experience in the use of it, reveals with fair certainty the early stage of aneurysm, tuberculosis of the lungs, and atheroma of even small vessels. It also gives clearer light in regard to internal organs generally, as the very instructive and beautiful demonstrations of Dr. Cummings in the Museum give proof. In treatment it is taking fresh ground as the handmaid to medicine and surgery, and as a substitute for the knife in certain cases.

Gentlemen, your visit finds us at an important if not critical stage in the "making" of a nation; and we need hardly assure you that the profession will do its full share in this regard, as the academic training and knowledge of men and things on its part well qualify it to do.

I am proud to be able to say to those who visit us that in no part of the world are the best traditions of medicine and surgery held in higher esteem than by the profession of Canada; and in no part is there less tendency to bow down to false gods. We are facing problems, some of which you have solved. Our aim here is to raise the standard of the profession still higher.

Unfortunately, the Roddick Bill embodying the principle of Dominion registration did not carry. The efforts of Dr. Roddick in this behalf have made his name a household word in the profession. Let us hope that ere long the Act will be in force, so that the credential thus obtained will be a passport to all the Provinces of this great Dominion.

As in the cross-section of some mighty tree Nature has writ indelibly in annular rings the history of its early growth, be it of two or three thousand years, so that one can read as on an open page the infallible record reaching back through cycles of years—in the same way we can trace the growth of a tiny seedling in the dim past to the great growing tree of medical knowledge of our own day, whose leaves are indeed for the healing of the nations. What matters it if it be not yet quite symmetrical, and show signs of vigorous growth at some past epoch and of a dormant state at others? If we can see scars which show that the hand of the faithful pruner at this stage or that in its growth did not spare the tree but showed a purpose in the pruning, sap and vitality thus seemingly lost only giving strength and better fruitage to the other portions—if we can see that from time to time, and much of late, branches of other sort grafted into the essence of its life, it is even now a thing of beauty which will not only live and grow, but be a joy for ever.
—*Brit. Med. Journal.*

A MINISTRY OF PUBLIC HEALTH.

BY H. G. BUSHNELL, M.D.

Stephen Nalle Memorial, Brighton, England.

My object in introducing the subject of a Ministry of Public Health is to seek your views on the practical need and value of such a department, and of its power to safeguard and improve public health. You are aware that the medical world has expressed itself in favor of such a creation with no uncertain voice at large meetings at Bradford, Brussels, Paris, Exeter, Swansea (British Medical Association), and elsewhere. This means that the scientific and social problems of preventive medicine are such, both from their special nature, their magnitude and their importance to the community as to call for a separate health department with an expert minister of cabinet rank at its head.

There is, however, no sign of a translation of our wishes immediately or in the near future into practical effect. This is so despite the fact that no substantial argument has been brought forward at the discussions on the subject at the British Medical Association or elsewhere, to dispute the validity of the step.

However old and commonplace the saying may be, it is a fundamental and bed-rock truth that health is happiness, and is the surest and soundest estimate of a nation's prosperity.

The question of expense is the most usual one which one has to meet. It is seen to be easily answered when such an organization is considered as an insurance against disease, that is to say, one by which disease will be prevented. So you realize the cost of supporting wage-earners incapacitated by sickness would be enormously reduced by a very small decrease in the prevalence of communicable diseases. But it is unnecessary to dwell upon the problems that would confront such a department. They are well known to you, and as disease never ceases in its attacks, and, indeed, is continuously changing its mode, clearly it should be met by an organization with an expert chief at its head, who has full powers and capacity to use his forces.

There is every reason that the State should efficiently equip itself in this respect just as the State deals with education and defence by a development of existing methods. History bears

out that the right leader in such a case would do more, by a wise advocacy of public health policy, in one year than is possible under other circumstances in a dozen. In the Dominion, New Zealand, United States of America, Austria, and in other countries the medical profession has recently emphasized these views and called for a solution such as I have described. Just as I have not detailed the most interesting problems and the proper procedures to meet them which confront us, so I propose to merely give an outline of a health department's constitution.

First and all-important is the expert minister of cabinet rank, who would have at his disposal an advisory council of representatives of the civil, naval and military services, of education, of agriculture and veterinary medicine. Their functions would be initiating, collating, recording and advising on all public health measures.

Then there would be a Public Health Board or Committee who would administer or superintend the administration of the public health services, including hospitals of all kinds, sanitary works, vaccination, pathological and public health laboratories, etc. This would consist of the Minister of Public Health, representatives of the various health services, of pathology (including laboratories, necropsies, etc.), of engineering (works), of law and poor law, of registration of births, deaths and marriages, parliamentary and financial affairs. At the disposition of such a Board would be a principal inspector and inspectors who may be committed to a public health policy, and who represent public health services (civil, executive and local).

Such a powerful national Health Board can only be evolved by a strong party or group in Parliament, medical and lay, who are committed to a public health policy, and who represent public opinion as well as lead it.

What practical steps can you take to forward such an end? One would be to obtain by your influence the recognition of the subject as an "official" one in congresses of hygiene or medicine, which would ensure its regular future consideration by our profession, until more active steps were taken, such as the formation of an International Committee to promote a health policy in all countries.

Clinical Department.

Phlegmonous Cholecystitis. G. A. WRIGHT, M.B. OXON., F.R.C.S.
ENG., Professor of Systematic Surgery, Victoria University of Manchester; Surgeon to the Royal Infirmary, Manchester, in *The Lancet*.

Phlegmonous cholecystitis may be defined as a severe form of acute inflammation of the gall-bladder going on to suppuration in the wall of the gall-bladder or even to local or general gangrene. Robson tells us that this—the “acute progressive empyema” of Courvoisier—was first described by Potain in 1882, but it will be found that Wilks and Moxon mention that acute idiopathic inflammation “with formation of pus in the wall or great infiltration of it with lymph or ulceration have been met with in fever and in cholera.” Robson relates some cases in his book and another in his Hunterian lectures (1904) in which the condition was due to gall-stones impacted in the lower part of the common duct. Suppuration of the pancreatic ducts also occurred and the patient died on the fourteenth day. It is, however, admittedly rare and but little mention of it will be found in most of the large text-books, though Rolleston gives a full account of it. The fact that three cases of it have come under my observation in the last few years shows that it is not so rare as to be negligible. It is, moreover, practically certainly fatal from peritonitis with or without perforation or from toxemia unless it is recognized and dealt with. Even after operation the mortality is exceedingly high.

Phlegmonous cholecystitis is somewhat difficult of diagnosis and liable to be mistaken for acute intestinal obstruction, acute pancreatitis, and acute appendicitis. In a case published by Hotchkiss and in one of my own the mischief was thought to be appendicular before operation. In Lane's case acute obstruction of the large intestine was diagnosed, and indeed existed, as the result of pressure from effused lymph. In a case of Roswell Park a diagnosis of appendicitis was also made, but acute suppurative cholecystitis with gall-stones was found. This case recovered after operation. D. A. K. Steele relates a case which was treated by incision and died suddenly from pulmonary embolism on the eighth day and another in which a fecal abscess formed with subsequent discharge of gall-stones through the

operation wound. Sheild, in 1895, records a case of perforation, possibly from typhoid fever, and quotes Murchison on the subject. Richardson relates and comments upon nine cases of varying degrees of severity, only one or perhaps two being actually gangrenous. In the Transactions of the Philadelphia Academy of Medicine for May, 1904, G. Davis mentions a case of gangrene associated with calculus. A pericystic abscess existed and in spite of cholecystectomy the patient, a man, aged 70 years, became delirious and died after some weeks. Gibson reported a case to the New York Surgical Society of discharge of a sloughing gall-bladder, probably a result of calculous cholecystitis. Lilienthal mentions eight cases of gangrene out of 42 cholecystectomies in his own practice; seven were calculous. All the patients recovered. It does not appear, however, that all were of the fulminating type.

Many cases of perforation of the gall-bladder due to, or associated with, typhoid fever, and in some instances with calculi also, are to be found on record, but in most the clinical picture is different from that of the acute gangrenous or phlegmonous or fulminating cholecystitis—whichever title may be preferred—which we are now considering. However, typhoid fever and gall-stones must be considered as the most common causes of the disease. Typhus fever, malaria, sepsis after operation, and puerperal fever are other assigned causes. Probably irritation of the gall-bladder by calculi, with resulting secondary infection by the bacillus coli with or without other organisms, is the most common sequence. One of my cases apparently shows that chronic pancreatitis may be a cause of this as it is of other gall-bladder troubles.

The symptoms of phlegmonous cholecystitis are somewhat as follows. The onset is usually but not always sudden. There are pain and tenderness in the gall-bladder area and there is usually vomiting. Distension and rigidity are present and more marked on the right side. Constipation is the rule. Toxic symptoms with prostration are usually most severe. A failing pulse, with delirium, dry tongue, twitching, suppression of urine, urticaria, rigors, and rapid emaciation may all be present with other complications also. Jaundice is variable and does not always appear. Fever is usually, though it is said not always, present—it may be ague-like in character. It may or may not be possible to feel the gall-bladder. When the peritoneal cavity is opened a coating of lymph may cover the exterior of the gall-bladder and adjacent parts, or a cavity may be broken into of which the boundaries are doubtful; or, on the

other hand, the gall-bladder may be quite distinct even though gangrenous in places. The gall-bladder, whether large or not, may be green or purple or black in varying patches. The contents may be bile or bile and pus with blood in uncertain proportions and may be thin or so viscid as not to escape from a large needle puncture. Finally, calculi may or may not be present either singly or in large numbers.

In any case where there is a suspicion of phlegmonous cholecystitis an immediate operation is no doubt demanded. The exposed gall-bladder should be incised, emptied of calculi or bile, and drained, or if it is gangrenous and the patient is not too feeble it should be removed (cholecystectomy). The surrounding area will need cleaning and draining if it is infected.

The chief dangers of the condition are: Death from general toxemia or peritonitis with or without perforation. A certain proportion, however, recover. Other complications are parotitis (as in one of my cases), suppression of urine, and cholangitis, as well as the other troubles that may accompany any severe inflammatory condition. Bacteria of several kinds were found in one of my cases but apparently no organisms other than those usually present in acute inflammations in connection with the alimentary tract. The diplococcus in one of my cases was of doubtful nature. The diplococcus pneumoniae has been found as in one of Richardson's cases.

A brief account of my three patients is appended:

CASE I.—On Feb. 20th, 1897, I saw, with Mr. G. Byrne, of Charlton, a man, aged 31, who had been suddenly attacked with pain in the right iliac area while he was at business. He, however, went about until the 19th, when he was seized with violent pain and sickness. Delirium with a temperature of 101 deg. F. and marked iliac swelling were then observed by Mr. Byrne. On the following day his temperature was 100.5 deg. There was a well-marked hard mass in the right iliac region reaching nearly to the umbilicus. The swelling was fairly well defined and in its centre was a softened spot near McBurney's point. He was flushed and sweating. He had never had a previous attack of the like nature. Believing the condition to be one of acute appendicitis I opened the abdomen. A quantity of yellowish serum escaped and the tissues were rather edematous. In the right iliac fossa there was nothing wrong, but on feeling further the gall-bladder, enormously distended and as hard as a solid mass, was felt reaching down to the umbilicus. The great thickness of the abdominal wall and the depth of the gall-bladder prevented us from bringing it up to the surface. It

was black in appearance and looked as if it were gangrenous. About ten ounces of black bile were drawn off and the gall-bladder was fixed by sutures and incised. Ten gall-stones of the size of maize escaped and within the next two months 342 more calculi came away, leaving at that time a small sinus with slight bilious discharge. Altogether 402 calculi were discharged and in May, 1898, the patient was in good health, except that he said he could still feel "stones rubbing together" and the scar was somewhat yielding.

Possibly a more radical operation would have given more complete and rapid good results, but the patient's condition and the circumstances of the operation were not favorable for a prolonged manipulation.

CASE 2.—In July, 1902, I saw, with Dr. A. J. Jefferson, of Rochdale, a man, aged 68 years, who had been ill for a week. He improved somewhat with rest, but three days later had severe pain with swelling in the right hypochondrium. His temperature was 103 F., and there was slight jaundice. He had not vomited. After a dose of morphine he seemed better. When I first saw him the temperature had fallen to 100 deg., his pulse was 115, but his tongue was dry and brown and there was obvious distension of the gall-bladder. The abdomen was opened and the gall-bladder was found to be greatly distended and surrounded by recent adhesions. In places it was on the verge of gangrene and contained brownish fetid bile and five or six gall-stones of the size of peas. The bladder was opened and stitched into the wound.

Dr. Jefferson informed me that the patient went on fairly well at first but died about five days later from collapse. In this instance also the man was much too ill and broken down to bear any such operation as cholecystectomy, which would no doubt have been desirable. We do not know the exact cause of the subsequent fatal collapse, but it is likely that perforation may have occurred.

CASE 3.—On May 22nd, 1906, a man, aged 52 years, an ex-soldier and commissionaire, was admitted to my ward at the Royal Infirmary. He had served in India and had had malaria but neither typhoid fever nor dysentery. Six years ago he had a slight attack of supposed appendicitis, but was ill only for about a week. Since then he had been well, except for dyspepsia, until May 13th. On this day he was seen by Mr. J. T. Smith, of Chorlton Road, for abdominal pains and sickness. On the 12th he had very severe epigastric pain with a rigor. There were jaundice, local tenderness over the gall-bladder, and rigid-

ity; the temperature was 99.2 deg. F., the motions were loose and pale, and the urine was high-colored. The temperature continued high, but he was otherwise better until the 15th, when he had another rigor. Delirium and suppression of urine followed and, though a temporary improvement occurred during the next two days, he again became delirious, with a quickening pulse and a temperature of 102 deg., and on the 21st there was again suppression of urine.

On May 22nd the patient was admitted to the Royal Infirmary. On admission he was seen to be very feeble and thin, with moderately deep jaundice. He was delirious and had subsultus tendinum. The abdomen was somewhat distended and rigid and a swelling could be obviously felt in the region of the gall-bladder. The tongue was dry and the whole condition was suggestive of profound toxemia. On the same afternoon the abdomen was opened and the presenting gall-bladder was incised after failure of an attempt to draw off the contents through a syringe. About three ounces of dark green bile too viscid to flow through the needle escaped. The walls of the gall-bladder were thick, soft, colored with various patches of green and purple, and apparently gangrenous. No calculus was found either in the bladder or ducts, nor could any cause of obstruction be felt. The liver was enlarged and greyish in color. Though the man bore the operation fairly well it was not thought wise to excise the gall-bladder, and it was, therefore, fixed in position and drained. Its walls were friable and tore easily. On the 23rd he was still delirious and twitching. A good deal of bile had escaped. He had swelling of the left parotid gland which was enlarged to the size of a small orange and evidently very tender. The fever was less. The urine was free from albumin, but still contained bile. On the 26th the jaundice was less marked, and all the symptoms had improved, but on the 27th parotitis appeared on the right side, and on the next day a slight purulent discharge from the left ear and patches of softening in the left parotid were found. Incisions were made in the left gland. Phenate of soda mouth-wash had been used since the first appearance of parotitis, but the mouth was persistently dry. On the 30th urticaria was noticed all over the body; otherwise he was much in the same condition. The pus from the parotid was found to contain numerous staphylococci and the bile contained staphylococci, bacilli coli, and some large diplococci. The patient went on without any marked improvement until June 8th, when hiccough and vomiting came on and he died on the 10th.

At the post-mortem examination the liver showed dilatation and inflammation of the ducts (cholangitis); no gall-stones were present. The head of the pancreas was enlarged and was the seat of chronic inflammation. Possibly the inflammation of the pancreas may have caused the obstruction or have been the result of extension of inflammation from the gall-bladder, probably the former, since the process was chronic and its appearance at first suggested the presence of growth.

Though it is not possible to draw any hard-and-fast line between the milder forms of acute cholecystitis and this fulminating or gangrenous variety, there appears to be sufficient ground for a clinical distinction as there is in inflammation of the appendix. I am not aware of any observations as to the occurrence of gangrene of the gall-bladder as a result of localized obstruction to its main blood-vessels, though it is not unlikely that this might occasionally occur, and Robson alludes to it. Probably many other cases have been met with and, perhaps, recorded, for the disease is a striking and terribly fatal one, though Murphy says that all of his cases (he does not say how many) operated on before the third day recovered.

The present paper formed the basis of a clinical lecture and the record of the third case is from notes mainly taken by my house surgeon, Mr. R. E. Ferguson, and one of my dressers, Miss Alice Obendorfer. For the bacteriological report I am indebted to Dr. E. B. Leech.

If there is repeated vomiting and the patient shows some evidences of collapse, after a laparotomy, especially after operations in the gastric region, examine for separation of the wound and prolapse of the abdominal contents.—*American Journal of Surgery*.

THE early reappearance of fluid after tapping a hydrocele does not necessarily mean that the operation has been a failure. It may be but an inflammatory reaction, subsiding spontaneously or under the application of unguentum iodi.—*American Journal of Surgery*.

AN ointment of beta-naphthol, 10; sulphur, 45; lard, 24; and green soap, enough to make 100 parts, is useful in removing gunpowder not too deeply situated in the skin. It must be employed cautiously, however, to avoid a destructive dermatitis.—*American Journal of Surgery*.

Therapeutics.

The Use of the Pessary.

You will see, in the listing of this symposium, an application of the old saying: "The first shall be last, and the last shall be first," for although the use of the pessary is the last method mentioned on the list, it is the first to be used by practitioners all over the land. This is not my opinion alone, but one that is shared by others, both in this country and abroad. H. Macnaughton Jones (*British Medical Journal*, 1904, No. 5, p. 97) states that "In general practice treatment by pessary is probably more resorted to than is any other therapeutical step in the conduct of a gynecological case." A. M. Leonard (*Medical Age*, 1904, p. 281) adduces testimony to show that pessaries are generally recognized as valuable to the gynecologist, quoting Mann as follows: "Without pessaries I should not know what to do for a considerable number of cases that come to my office, and I should have to give up gynecology, although I might continue to do laparotomies." Hirst (*Text-book of Diseases of Women*) remarks: "There has been a reaction against the indiscriminate use of pessaries that has gone too far. No one can successfully manage a number of cases of retroversion, no one can retain a considerable proportion of his cases, who has not mastered the art of supporting the uterus in this manner." F. H. Davenport, of Boston, thinks "This dislike and distrust of the pessary has been carried too far."

These quotations indicate the trend of mind in men who are meeting and dealing with these cases constantly, and constitute a perfectly logical resultant due to the fact that the pessary has secured successful results in a large proportion of cases when it has been judiciously used. Davenport estimating this proportion to be 50 per cent. It should be borne in mind that this does not refer to all cases of displacement, but to that class only from which all contraindications are eliminated. The great outcry against the pessary has been caused by faulty judgment in its use. There are many cases where one should never even think of using a pessary, but the fitness or unfitness of any given case can only be determined through experience. This is recognized by those who have endeavored to master the subject, and their opinions have been frequently expressed. At a meeting of the German Gynecological Society held in Halle a few

years ago, Fritsch declared that he considered it easier to perform a laparotomy than to apply a well fitting pessary, and zealously advocated the treatment by pessaries. He had spent ten years in learning and considered it the most difficult subject in the whole of gynecology.

The discussion of this subject might be carried to an indefinite extent if it should include all the various pessaries devised; therefore, when I speak of the instrument it will be understood that I refer only to the Smith-Hodge type. I consider it the most valuable form for ordinary cases.

The different opinions held by members of the profession as to the value of the pessary are based upon the varied results in its use, which are good, indifferent, or bad. If these results were invariably indifferent, or bad, its career would soon terminate. That it has done so, that the result is sometimes good, is a proof of its value when properly used. The same disagreement exists concerning operative measures, as shown in the diversity of operations devised for the correction of uterine displacements and extends to the subject of the mode of action of the pessary, prominent men in gynecological societies differing radically in their conception of the *modus operandi*. Again, the men who are constantly operating have not that store of patience that this minor work demands, nor do they come in contact with so large a proportion of correctible cases, for they have been screened out as they pass through to the hands of the general practitioners, and only the obdurate cases which resist tampons, pessaries, hot douches and laxatives reach their field of vision. There is nothing remarkable in their antipessary attitude. Many of them, also, have forgotten the number of women they benefited years ago, when the peritoneum was sacred, and Alexander's operation, hysteropexy and all of their kind were not even the figments of a dream.

Function of the Smith-Hodge Pessary.—As explained to me by Dr. Albert H. Smith and patent to every one, his modification of the Hodge instrument consists, first, in shortening the lower bar, thus bringing the lateral bars in converging lines to conform with the inverted pyramidal confines of the vagina, thereby lessening the chances of its extrusion from the body; and, secondly, curving the lower portion downward to carry it away from the urethra. Given a properly selected case and instruments, the function of the pessary is to push the posterior vaginal fornix upward and backward, and in so doing carry the cervix with it. It does not touch the uterus. As the uterus is pivoted upon a transverse axis (the broad ligament)

from a point one inch or more below the fundus, to a point a little above the vaginal portion, the natural result of carrying the cervix backward is to rotate the uterus upon this axis, and sweep the fundus forward. The object in view being to carry the cervix as far back as possible, the Thomas modification (increasing the anteroposterior diameter of the upper bar to distribute the pressure over a greater area of membrane) does not seem desirable, as it tends to defeat this object, for, although it takes the posterior vaginal wall back to the desired position, the thickened bar prevents the cervix following it to the best advantage, and it is the position of the cervix alone that counts.

Indications for the Use of the Pessary.—A. In all cases of uncomplicated retroversion when the uterus can be brought forward, especially in young women and in cases of recent origin, as after a fall or severe and undue muscular exertion. This result is sometimes accomplished at the first meeting; more frequently it is not secured until after several careful, well guided attempts have been made. At times the fundus is readily dislodged, but stubbornly refuses to reach anywhere near where it is desired to go, due to adhesions, post-inflammatory deformities of the peritoneum, perfect coaptation of posterior uterine and anterior seated peritoneal investments and imperfect technics.

The most common causes are adhesions and peritoneal contractions, but one must not forget that absolute coaptation of rectal and uterine peritoneum may be so perfect as to prevent their separation; in other words, they are held together by atmospheric pressure. This fact I verified ten years ago at an operation in a case of retroversion that I had treated with tampons and pessary. The instrument gave relief, and the patient insisted upon its use, during which time the fundus came partly forward, but dropped promptly back when it was removed. When the abdomen was opened, the separation of the fundus from its bed was accompanied by a faint suction sound, but not a sign of an adhesion was present, nor was there contracting deformity of any kind, the fundus being brought forward without difficulty. The explanation was found in the condition of the rectum. That tube was very distensible and relaxed as were the peritoneum and subperitoneal connective tissue resisting it. When efforts were made at reduction, even in the knee chest position, the rectal wall would follow the uterine wall in its forward movement, so closely, that at no time did it allow an intestinal coil to intervene, a *sine qua non* to success.

B. Temporary use before or after operation. Not every case of retroversion is in proper condition for operation when first seen. Apart from those presenting symptoms of endometritis requiring a preliminary curettage or other treatment, we meet with others of subinvolution with an antevertible uterus, in which the pessary is of unquestionable value in retaining the organ forward, while proper treatment is applied to reduce its size and weight. Neglect in utilizing it for this purpose has led to total failure. Recently I examined a patient operated upon by one of the ablest gynecologists of this city, where a big, heavy uterus had torn loose from its attachment to the abdominal wall, and was lying in the hollow of the sacrum, after a hysteropexy of a few months before. A pessary should have been used in this case either before the operation or after, and perhaps both. In 350 hysteropexies done at the Kensington Hospital, Noble reports a relapse of 5 per cent. or 17 cases. If the same result follows will other operators consider the benefits a pessary would have conferred if successfully used in every case? If circumstances will not permit preparatory treatment, the supporting assistance of a pessary after an operation upon a large, heavy uterus is a measure of the most consistent character.

Among conditions other than subinvolution calling for this procedure may be mentioned chronic cystitis. After a hysteropexy and while the fundus is firmly held against the abdominal wall, the cervix may swing forward pressing the bladder against the pubic bone, causing great distress. This occurred in one of my own cases, and was relieved by the use of the instrument, which was worn for several months, at the end of which time successful treatment of the cystitis permitted its permanent removal.

After Childbirth, in Cases Predisposed or Predisposing to Retroversion.—If there is any time in uterine life when retroversion is most amenable to treatment, it should be during the puerperium, when advantage may be taken of the wonderful work of involution to guide this physiological process to a successful termination.

The judicious use of a pessary at this time, in cases which have been previously retroverted, or in which examination reveals that it is just beginning to occur, cannot fail to merit the approbation of thoughtful gynecologists. The proper post-partum period for instituting this treatment will depend upon the various lesions which the tissues may have sustained during parturition, but in the majority of cases from the seventh to the

fourteenth day will be sufficiently early. At a recent meeting of the Section in Obstetrics and Gynecology of the New York Academy of Medicine, this use of the pessary was unanimously agreed upon by all who spoke upon the subject.

Without enlarging at all upon the matter at this time, I wish to mention the value of the pessary in the cure of sterility. My attention was called to the fact many years ago, by Dr. Joseph Price, whose large experience and keen observation well fitted him to deduce correct conclusions.

When should Its Use be Forbidden?—There are many contraindications to its use, some of minor quality, such as vulvar lesions (venereal sores, inflammation of Bartholin's glands), vaginitis, acute cystitis, and others, which the practitioner will instinctively recognize; others not so obvious should be taken into consideration. A very remote one, but still one to be remembered, is the predisposition to cancer. Neugebauer, Jr., found that out of 255 cases injured by the use of the pessary, eight had cancer, apparently caused by irritation of that instrument.

When, through laceration or relaxation, the retaining power of the vagina is lost, a pessary is useless. A conical vagina, narrowing rapidly to the insertion of the cervix; senile changes, rendering the mucous membrane smooth, inelastic and triable; the condition of the parts after amputation of the cervix; laceration of the cervix, especially if bilateral—all constitute prohibitory factors to the use of a pessary. Tumors of the uterus are included in this list, but their significance would vary with their size, character and position.

Opinions differ concerning its use in retroflexion, but, personally, I am strongly opposed to it as its action is to decidedly increase the lesion.

Probably the worst results—the most painful and deplorable—follow the injudicious use of the pessary in adherent retroversions, and in tubal and ovarian inflammatory conditions, acute or otherwise, or in cases of simple prolapsed ovary, and peritonitis at any stage.

Not the least, among the contraindications, is the lack of special training and knowledge on the part of the practitioner, necessary in utilizing the instrument to the best advantage. This has been recognized for years. As far back as 1863 McClintock (*Diseases of Women*, p. 63) says: "The employment of pessaries for supporting the uterus *in situ* has been strongly condemned by some authors of deservedly high reputation. But most of the objections which have been brought against them

are founded on their abuse." Marion Sims (*Clinical Notes on Uterine Surgery*), remarks: "Each individual case must be especially studied, and that its complication and peculiarities must be investigated, understood and regarded, if we will cherish the hope to be able to treat them certainly and successfully." Emmet thinks: "This subject is one of the most important and least understood. The practitioner to become an expert in fitting a pessary, that it may do no harm, must have a decided mechanical talent, and that the full benefit may be derived from the use of the instrument he must be able to appreciate slight shades of indifference, which would be entirely overlooked by others." Skene believes that, "No one who is destitute of some knowledge and skill in mechanics will ever succeed in the treatment of displacements of the uterus by means of mechanical support."

I have selected these opinions chiefly from the writings of men who were unacquainted with our modern operations, mainly because, not having the advantages we now possess, they studied this, their chief method of treatment, more closely, and developed their skill to the greatest extent.

In order to form some estimate of the frequency which retroversion is met with, I present a computation of 1,300 cases, 1,000 from my clinic at the Polyclinic Hospital, and 300 from notes in private practice. In the 1,000 hospital cases, retroversion was present in 165, 16.5 per cent. The hospital notes were so meagre that no conclusions could be deduced from them. In 300 private cases it occurred in fifty-seven or 19 per cent. A careful examination of the histories of the latter group gives this result:

	Cases.	Per Cent.
Pessary used; reported cured	21	36
Pessary not used; reported cured	4	7
Pessary used; reported not cured	7	12
Passed from observation	23	40
Remaining under treatment	2	3

The 43 per cent. of reported cures in this table closely approximate the 50 per cent. of Davenport.

And now I am about to make a statement that may seem heretical, but I am impelled to do it because I think it is the truth. While I believe retroversion one of the most frequent causes of suffering in women, I am being more and more convinced that it is *not necessarily pathological*. I know that many cases exist which give rise to no symptoms whatever. I have

watched the progress of patients treated with pessaries and tampons, where the displacement was as great as at the beginning, yet the symptoms had been so entirely eradicated that the patients have refused further treatment, and have positively declared themselves well. I have met these same patients years afterward, and I have found them well and happy, having had no treatment in the meantime. The statistics I have made, though very meagre, show that nearly one woman in every five under treatment has a retroverted uterus, yet a number of these cases become symptomatically well, with and without the use of a pessary and but very few out of the whole number ever really require an operation.

The sufferings induced in those cases which have become pathological are through involvement of the 3rd or 4th sacral nerve for the direct, and the inferior hypogastric and ovarian plexuses of the sympathetic for the remote symptoms, and are probably, at first, due to venous engorgement, as the veins of the uterus are unusually large. This hyperemia may exist for a long time without giving rise to symptoms, and it is only when a certain point of engorgement is reached that they appear, and fluctuation to one or other side of this line will make for comfort or the reverse, this being greatly influenced by capillary and venous changes and involvement of adjacent organs.

If I find, as I have found, retroversion absolutely without symptoms, I let it alone and do not tell the woman. It is far better for her not to know of it. If symptoms, direct or reflex, are present, and for relief of which the patient has applied to me, I recognize that the boundary line has been crossed and adopt my measures to meet the case. If tampons will suffice, well and good; if a pessary can be applied and give relief, it is used promptly. If after a reasonable trial all minor measures are unsuccessful, I explain matters clearly to the patient, advising an operation, and, if she consents, I operate as promptly as I use the pessary.

In conclusion: Whatever opinions may be held by the opponents of the pessary, it is an established fact that too large a proportion of cases treated with it secure a symptomatic or positive cure to allow an unprejudiced mind, possessed of these data, to doubt that the pessary has its own proper place in the armamentarium of the gynecologist and holds a field of usefulness and even importance in the treatment of retrodisplacements of the uterus.—*H. A. Slocum, M.D., in N.Y.M.J.*

Society Reports--Notes of Interest.

BRITISH MEDICAL ASSOCIATION, TORONTO MEETING, NOTES.

The British Medical Association was organized in 1832 under the name of "The Provincial Medical and Surgical Association." It had then fifty members. It was reorganized in 1856 and its present membership approaches 20,000. It has sixty-eight branches.

Henry Davy, M.D., M.B., F.R.C.P., London, physician, Devon and Exeter Hospital, is the President-elect of the British Medical Association, which will convene in 1907 in Exeter, England.

Delegates were present to the British Medical Association meeting in Toronto from India, Australia, South Africa, New Zealand and Tasmania; one delegate travelled 10,000 miles.

It is said that the paper, "Insanity of Inebriety," by Dr. T. D. Crothers, of Hartford, Conn., U.S.A., was the most widely quoted paper of the Association. It was abstracted and digested in the leading dailies of this country, as well as in many of foreign lands.

It was prominently brought out that alcohol does not now hold the place it once did as a therapeutic agent, as was pointed out by Sir Victor Horsley, Professor Sims Woodhead and Dr. Murdock Cameron, Professor of Midwifery in Glasgow University.

Dr. C. B. Rama Rao, India, was happy in pure, cool, white duck, whilst others sweltered under gold and crimson robes during the opening ceremonies and at the special convocation. He was an earnest champion of vegetarianism. This gentleman is forty-four years of age, and has practiced twenty-four years and has never eaten meat.

Sir James Grant, Ottawa, physician to a long line of Governors-General, considers that people eat too much, but does not think that one could subsist in our rigorous climate on vegetables.

That which was most talked of was the souvenir booklet. Many fine things have been said of this production in many of our exchanges. It certainly represents the Canadian printing art in a high state of perfection. The Printing and Publishing Committee stepped high all the time. The Methodist Book Room did the work. A banquet to the Committee seems to be in order.

At the special convocation the following received the honorary degree of Doctor of Law: Dr. W. J. Mayo, Rochester, Minn., President of the American Medical Association; Dr. Louis Lapicque, Paris; Professor, Dr. L. Aschoff, Freiburg, Germany; Dr. T. Clifford Allbutt, Cambridge; Dr. A. H. Free-land Barbour, Edinburgh; Sir Thomas Barlow, M.D., London; Sir James Barr, M.D., Liverpool; Sir William Broadbent, M.D., London; Dr. Henry William Langley Brown, West Bromwich; Mr. George Cooper Franklin, F.R.C.S., Leicester; Dr. W. D. Halliburton, London; Sir Victor Horsley, F.R.C.S., London; Dr. Donald McAlister, Cambridge, and Sir William Julius Mickle, London.

The Exhibit Committee presented an excellent exhibition. Amongst those who had splendid exhibitions were Parke, Davis & Co., Glyco-Thymoline, Henry K. Wampole & Co., Fairchild Bros. & Foster, Denver Chemical Company with Antiphlogistine, R. L. Gibson (Toronto), J. B. Lippincott Company, J. A. Carveth & Company with Saunders' books; Globe Manufacturing Company (Battle Creek), H. & T. Kirby Company (London, England), Robinson's Patent Barley, Clark & Roberts Company (Indianapolis), Mellin's Food Company, C. J. Hewlett & Son, J. F. Hartz & Co., Chandler, Ingram & Bell (Toronto), Burnham Soluble Iodine Co., E. B. Meyrowitz (New York); the Allen & Hanbury's Company, through their agent, Mr. Lloyd Wood (Toronto); Lambert Pharmacal Company, through the same agent; F. A. Davis Company, Medical books; Burroughes, Wellcome & Co. (London); the Bausch & Lomb Company, Duncan, Flockhart & Company, through their agent, Mr. R. L. Gibson (Toronto); The Apollinaris Company, Apenta, etc.; Kress & Owen Company (New York), New York Pharmacal Association, Palisade Manufacturing Company, Mr. Gibson (Toronto), The Arlington Chemical Company (same agent), Horlick's Malted Milk, The Chas. H. Phillips Company (New York), Walter Baker & Company, Ferris & Company (Bristol), Mr. Gibson; Armour & Co. (Chicago and Toronto), Lea Brothers & Company (Philadelphia), Benger's Food Company, and many others.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only \$2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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Dominion Medical Monthly

And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVII.

TORONTO, OCTOBER, 1906.

No. 4.

COMMENT FROM MONTH TO MONTH.

Dr. R. F. Ruttan, Professor of Chemistry in the Medical Faculty of McGill University, had the honor of delivering the opening lecture of the seventy-fifth session, the session of 1906-1907. His address was partly historical and partly progressive. The latter, owing to the continued rush into medical student life, needs notice. He instanced two methods to bring about what he termed educational equilibrium between the laboratories and clinics; in other words, deploring the shortness of the present medical course and the fact that too much time was taken up with the elementary subjects. For matriculation he would exact a degree in arts, with a special training in those scientific subjects relating to medicine. Then he would extend the four-year course to one of five years, and make it so in fact

and not in name. We believe that Dr. Ruttan advocates the right course, and those having the fixing of the standards should consider same accordingly. It is quite patent to everybody that the profession of medicine is congested; that young men, mere boys fresh from the collegiate institutes and high schools, are rushing pell-mell into medicine, believing it offers a means for securing an easy and comfortable livelihood, to say nothing to even being hallucinated with the idea that money can also be made in the profession. There has been in late years a falling-off in the aspirants of teaching, law and theology, and the consequence is that all sorts and conditions of men are rushing into medicine. Either the standard is low, the cost of procuring a degree in medicine low, or examiners, whole-souled and warm-hearted, are falling far short of their duty. And it is particularly in the interests of the young aspirants to the medical degree themselves that attention should be directed. While a few seem contented and prosperous in medicine, there are a great many, the majority we believe, who are making their living by additional means to the practice of medicine. The impression is abroad that the doctors are a speculating class, and in this way, perhaps, some of them do, as others do in different walks of life, make something for a "rainy day." The fact remains that the opportunities in medicine are greatly over-rated, and that they may be discounted at least 100 per cent. The law of the profession compels its devotees to sit still and wait, a process which is certainly unfitted for many young men with push, vigor and enterprise. The same amount of money and time involved in securing the degree of doctor of medicine, backed up by the energy and hustle of youth, would in present day commercial life, land most of these young men, in two decades at any rate, in positions of ease, if not in affluence of a moderate degree. Medical faculties should do something to stem the tide.

Montreal, the first city of the Dominion, as it should, has been the first to set the example of a systematic medical school

inspection. In that city there are 175 schools, with a school population of 150,000 souls. A feeble attempt was made at it last year, when some eight inspectors did some work. Recently forty medical practitioners were appointed by the City Council, and as an appropriation of \$3,000 had some time ago been set apart for the work, it was decided to give the matter a three months' trial. This will allow of each practitioner receiving \$25 per month for his work. This amount, of course, is inadequate, if a proper inspection is to be made every day or every other day, but it is on a line with all other payments to physicians for their services in the cause of the public interests. Medical inspection of schools, as all know, has been in practice in many large United States cities for some years, and we are told that it has been satisfactory. One inspector in Montreal, in his first report, gives some splendid reasons for the procedure. They may here be quoted: "Thirty-three pupils out of a class of sixty-six attacked by measles, as the result of one pupil suffering from measles attending that class; schools suffused by stenches from civic dump heaps; 15 per cent. of pupils at one school suffering from defective eyesight; 15 per cent. of the pupils at another school suffering from tumors, which are disclosed by a simple examination at first sight, and which are the cause of serious throat troubles. These tumors predispose the pupils to diphtheria, and reveal their presence by eruptions on the face; a school in a basement, where the light is defective, the air bad and the humidity permanent; a school beneath the basement of a church; temporary accommodation fixed up at one school to deceive the medical inspector; forty pupils crowded into one class-room, where the cubic contents of air barely suffice for fifteen; large numbers of pupils showing signs of tuberculosis and insufficient nutrition." If there is any class in any community which should be protected it is certainly those who are easily susceptible to disease. If there is any class which should receive attention at the hands of humanitarians and sanitarians it is the young. Their lives should be made for them all that is good, all that is pure and all that is holy. We can thank God we have not in this country the horrible monster

of child labor as it exists in certain States of the Union to the south of us. Let us then make, where we can, for all that is good and sweet in the lives of these little ones, even to the extent of keeping them where we can from the ravages of all sorts and conditions of disease and ill-health.

Editorial Note.

Merck's Annual Report on 1905, an impartial review of the year's progress in the practical branches of therapeutics and allied subjects, is received. Copies will be sent free of charge to Doctors and Chemists on application to E. Merck, Darmstadt.

Science Notes.

A Case of Alleged Reasoning in a Dog.

Wilhelm Ament, in *Arch. f. d. ges. Psychol.*, relates an anecdote concerning the behavior of a dog, a two-year-old "Zwergpinscher." According to Ament, the dog was accustomed to sit on a chair in front of a window overlooking neighboring houses and yards. One cold day the window was so thickly coated with frost that the dog could not enjoy his customary view. Confronted with this situation, the dog proceeded to lick the frost until a round area about the size of a plate had been cleared away with some difficulty. The dog then took up the more natural canine occupation of watching the cats in the adjoining yard. Several times during the winter the window was similarly cleaned for the same purpose.

Ament, being a psychologist, endeavors to explain this interesting bit of natural history. In very dignified and involved German he concludes that by means of the experience of wiping with its snout, the dog hit upon the licking away of at first the softened layers of ice, and later of the more solidly frozen ones. That the dog straightway hit upon the method of licking Ament does not consider surprising when we remember how often during the day a dog licks himself, everybody, and everything. Ament believes that, all things considered, we seem to have here the correlation of the series of experiences of ideas partly different from one another (wiping with the snout, licking with the tongue), partly analogous (licking away of other things and the licking away of frost on the window) with an end in view (namely, looking through the window).—*Scientific American*.

Nerve Impulses and their Propagation.

In a paper on the propagation of nerve impulse, published in the *American Journal of Physiology*, W. Sutherland gives it as his opinion that the electrical properties of nerves have received much attention, and the present hypotheses of nerve impulse propagation, though seemingly purely mechanical, are

in reality to be regarded as electrical also. For though he refers the "conductivity" of nerve to the rigidity of its substance, he has previously given electrical explanations of cohesion and rigidity. Two lines of thought lead to a conception of the possible importance of rigidity in the phenomena of nerve and muscle. In the first place it is known that a jelly offers but little more resistance to the passage of a small ion than does pure water at the same temperature, despite the enormous difference in the large-scale viscosities of the two media. This proves that in a jelly the molecules of the gelatine form a mesh dividing the jelly into compartments with network walls which confine the molecules of water in batches. The cellular structure gives to the jelly its rigidity, yet the meshes are so open that an ion urged forward by electric force has little difficulty in passing from one compartment to another, and encounters most of its resistance in passing through the batches of water molecules. Thus the jelly has rigidity on the molar scale, and fluidity on the molecular. Just as an ion moves through the jelly almost independently of the presence of the network, there ought to be phenomena of the jelly confined to the network as regards cause and effect. How would it be possible to propagate disturbance through a jelly without appreciably affecting its contained water, as a diver signals by his rope to the man in charge of the air pump? It seemed to Mr. Sutherland that muscular contraction and nerve conductivity might be physiological answers to this query. The second line of thought regards the slowness of the propagation of nerve impulse as probably connected with the small rigidity of the soft tissues in the animal body.—*Scientific American*.

Seasickness and Equilibration of the Eyes.

Many people have no doubt noticed, when travelling by sea, that the motion of the ship could be *seen* very distinctly, even when there were no hanging lamps, draperies, or fixed points, such as the horizon or clouds, within range of sight.

Some may think that seeing the motion in this way is due to the imagination receiving its suggestions from the motion of the internal organs, and especially the stomach, for I am here supposing the body to be held perfectly rigid.

From observations which I have recently made it seems evi-

dent to me that the cause for seeing the motion is entirely different.

In the first place, you can always see the motion a fraction of a second before you begin to feel it. In the second place, you cannot see a perfectly horizontal motion or a gentle vertical (heaving) motion. In the third place, watching a fixed point close to you, such as a pattern on a carpet, when the ship is pitching and rolling, is far more tiring to the eye-sight than when the ship is motionless or running perfectly steadily. All this points to the appearance being due to a true relative motion of the eyes to the ship.

The eyes are suspended in their muscular settings, much in the same way as are ships' compasses in their binnacles. The eyes are, furthermore, perfectly balanced, so as to make their muscular displacements as little tiring as possible. In their normal position, the pull of gravity is exerted vertically through their centers, and the muscular mechanism is compensated for gravity.

Any angular change of position will displace the eyes just as it displaces the stomach, excepting that the eyes, being a great deal more sensitively suspended, will register the displacements more quickly. It is not, however, the motion of the eyes which strains the eyesight, but the act of resisting this motion.

If, with your eyes shut, you attempt to fix the mental representation of a point, which a moment previously you were watching with eyes wide open, you will find that, after one or two motions of the ship, the bodily feeling will precede any visual sensation which your imagination can conjure up. The imaginary point is no longer fixed, but follows the eyes as they let themselves go to the motions of the ship. No strain of the eye-sight is caused by a muscular resistance, and the displacements, while felt, can no longer be seen.—*Alfred Sang in Nature.*

Poisonous Eggs.

All substances are poisonous when they are injected in a certain quantity into the circulatory system of an animal. The weight of the substance injected as compared with that per pound of the animal forms what is called its toxicological value. Numerous experiments have been made with a large number of substances especially by Prof. Bouchard, according to Cosmos,

who has studied the toxicological value of the physiological media; but up to recent times no one had investigated the toxic value of eggs. This has now been done, however, by M. Loisel, who has experimented upon the eggs of the common hen, the duck, and the turtle.

M. Loisel's mode of operation is as follows: He takes the powdered yolk of a duck's egg, for example, treats it with a 20 per cent. solution of salt, and injects into the veins of a rabbit until the animal dies. In order to kill a rabbit, it takes about 55 grains of the substance per pound of animal, say 180 grains for a rabbit of an average weight of $2\frac{1}{4}$ pounds. If an experiment be made with the same substance by injecting it into the general cavity, the toxicological value diminishes and the quantity required is from 375 to 450 grains.

The yolk of the hen's egg is less poisonous, and that of the turtle more so than that of the duck. The albumen of the egg also is poisonous, the toxicity increasing from the hen to the turtle. If we desire to know the cause of the toxicity, we must seek it in the chemical composition of eggs. These are composed of the yolk and the white. The white represents typical albumen soluble in distilled water, and coagulable by heat. The yolk contains a special substance, ovovitelline, which is insoluble in water, soluble in dilute saline solutions, and associated with organic phosphorated compounds, called lecithines, and cyanic ferruginous compounds called hematoxins, at the expense of which is formed the hemoglobine of the blood of the young chicken.

It is to nervine, a substance allied to the lecithines, and the toxic power of which is very great and which exists in extremely small quantity in the yolk, that is due the toxicity of eggs, as also to toxalbumens (bodies as yet little known), which are highly poisonous. According to M. Loisel, all the toxic substances of eggs act upon the central nervous system.

What is of consequence for us is not the toxicological value of eggs from an experimental viewpoint, but the toxic value of eggs ingested by the natural tracts, the cause of the putrefaction of eggs, and the physiological phenomena to which putrefied eggs can give rise.

Eggs, even when very fresh, give rise to severe cases of poisoning, although this depends on individual susceptibility, and according to M. Linossier, is more apt to occur in dyspeptics. The quantity ingested may be exceedingly minute, and the toxic symptoms may exhibit themselves even in a young child.

Mention is made of a fourteen-months-old child, who, in consequence of the absorption of an egg, had a nettle-rash eruption, and, two weeks afterward, a second eruption caused by a cream that had been given to it.

Such phenomena generally exhibit themselves by the appearance of urticaria. The substance that produces this, and is called ovotoxine, is analogous to those that cause similar effects and are met with in strawberries, mussels and sea fish, which give rise to accidents known by the name of botulism. We know that some individuals are very sensitive to the action of these substances.

There is here also a receptivity of the individual, and, as a consequence of these phenomena, eggs cannot be employed in cases in which there is a lesion of the digestive apparatus at some points of its passage, especially in typhoid fever, in which the intestine offers a wide surface of denudation into which the various toxins of the eggs might infiltrate. In all such complaints, we should prefer milk sterilized and boiled, and as free as possible from all toxins and microbes.

Along with the ingestion of normal eggs we may mention that of poisonous ones, of which neither the taste nor odor gives any hint as to their toxicity. This phenomenon is due principally to microbes that have entered the egg at the time of its formation, that is to say, into the very ovary of the duck and hen.

A remark apart must be made in regard to the toxicity of the eggs of the duck. This fowl as a general thing lives amid somewhat dirty environments, and it is possible for a considerable quantity of organic matter in decomposition to enter their organs and infect them. The egg in forming becomes contaminated with these substances rich in microbes, and thereby becomes toxic.

It is to eggs thus contaminated that may be attributed those toxic phenomena sometimes exhibited by creams. These latter, in fact, are not submitted to a very high temperature during their manufacture, while a temperature of at least 60 deg. C. would be required to destroy the pathogenic microbes of the egg. This is not compatible with culinary processes. From this point of view, since non-fecundated eggs are less toxic than fecundated ones, it is important to reject the latter as food for children and invalids. Finally, a third way in which eggs may become toxic after they are laid, is by the penetration of microbes through the porous shell. These microbes have been

studied by Zordenkofer, who divides them into two groups. The first group, which gives rise to a putrefaction which results in the production of sulphureted hydrogen, is the most common alteration. Ten species of this group have been described under the name of *Bacillus oogenes hydrosulfurens*.

The second group gives rise to a slightly different putrefaction, the odor of which recalls that of human excrement. This putrefaction, which is much more rare, is produced by a bacterium called *Bacillus oogenes fluorescens*. All these organisms need air for their development. It is, therefore, necessary to keep eggs from contact therewith by varnishing the shell or coating it with vaseline or milk of lime.

The use of decayed eggs is extremely dangerous. Dr. Cameron has called attention to a case of poisoning that happened in a convent at Limerick, Ireland, in 1895, after a meal at which had been served a cream in which a bad egg had been used. Seventy-four women who partook of the meal were poisoned, and four of them died.

An endeavor has been made in this article to recapitulate the causes of the poisoning of eggs and the damages to the system that may be caused by eating them. But it must be said that poisoning by eggs is of relatively rare occurrence, and that that produced by spoiled ones is exceptional.—*Scientific American*.

When we remark that in the manufacture of cocaine it is the percentage value of the alkaloid which determines the value of the raw material, we can see the necessity for the planter of finding a method of drying by which he will lose the least amount. In two series of experiments made by M. de Jong, of France, upon two products having different origins, he obtained the percentages of 1.49 to 2.77, or, in mean, 1.52 to 2.75 and 2.05 to 2.91. The fresh leaf furnishes the greatest amount of alkaloid, or from 2.72 to 2.91 per cent. When dried over lime, the leaf loses cocaine, and the value falls to 2.55 per cent. Drying in the sun is found to give values from 2.38 to 2.50 per cent., while drying at a heat of 40 deg. C. gives 2.28 per cent. A heat of 60 to 75 deg. affords 2.16 per cent. of cocaine. By drying in the shade for four days and then for over an hour in the sun, we find from 2.05 to 2.18 per cent. The method of drying in the sun after immersion in boiling water gives 1.50 per cent. From this we find that it is not an advantage to dry the

leaf over quicklime in practice. If sun-drying is to be advised, we must remark that the leaves should not be allowed to become overheated. It is not a good plan to let the leaves dry up naturally in the shade but they should be dried as quickly as possible. By the use of hot water we dissolve out some of the alkaloid. The best yield of cocaine is afforded from the fresh leaf.—*Scientific American*.

An important scheme has been decided upon for the study of tropical diseases, by the Indian Government. At the present time there are scattered over various parts of the country five centres, where the process of research is carried out upon a small scale. These institutions are the outcome of private enterprise, and work independently. Owing to their limited resources, the work they accomplish, while valuable, is necessarily somewhat small in scope. The Indian Government has now arranged to consolidate these various institutions, to enlarge their field of operations, to found additional laboratories in other parts of the country where investigation on the spot is urgently required, and to control their operations from one central institution. The latter is to be located at Kasauli, a small hill station in close proximity to Simla, from which point it can be easily reached and the institute supervised by the central medical and sanitary authorities of the Indian Government. The situation is well adapted for the work, the temperature being moderate, while scattered among the surroundings hills are numerous sanatoria, each of which possesses a large hospital. There is a Pasteur institute already in operation, but this will be merged with the new building, and the present administrator of the Pasteur institute, who has carried out much important and valuable work, will be the first director. The new laboratory will carry out original researches, and prepare and investigate curative sera for tropical diseases indigenous to this country and other similar climes, and the training of scientific workers. The existing scattered institutes will continue their present operations, original research in particular being stimulated. This new arrangement will prove of great value for all investigators of different countries of tropical diseases, since they will be encouraged to avail themselves of the institutions in India for carrying out on-the-spot investigations.—*Scientific American*.

News Items.

WINNIPEG is to have a City Home for Convalescents.

DR. CHARLES A. RITCHIE, Winnipeg, has gone abroad for a year.

FORTY doctors have been appointed medical school inspectors in Montreal.

DR. GAVILLER has been appointed medical health officer of Grand Valley.

DR. SHIRLEY MCMURTRY, of Montreal, has gone to Japan for two years.

DR. J. K. M. GORDON has returned to Ripley and will resume his practice there.

DR. MINERVA M. GREENAWAY, of Toronto, died in St. Michael's Hospital recently.

DR. CASSIDY has disposed of his practice in Drayton, and is moving to Toronto Junction.

DR. S. H. WESTMAN has returned to Toronto after three years' abroad and resumed practice.

DR. BREFFNEY O'REILLY has returned to Toronto and has commenced practice on College Street.

DR. GEO. W. BADGEROW, formerly of Toronto, has located in London, England, in nose and throat work.

DR. PERRY G. GOLDSMITH, formerly of Belleville, is now specializing in Toronto in nose, throat and ear.

DR. W. W. BOYCE, Belleville, Ont., has recently been appointed physician to the Institute for the Blind in that city.

THE number of patients treated in the Winnipeg General Hospital during the week ending September 15th was 360.

DR. H. M. CHURCH, Montreal, was recently tendered a banquet by the anatomical staff of McGill, before his marriage.

DR. GEORGE MCINTOSH, Macdonald's Corners, Ont., a graduate of Queen's two years ago, is dead of typhoid fever.

DR. GERIN-LAJOIE, who for many years was a practitioner in Montreal, has been named a surgeon-major in the French army.

DR. WILL MELDRUM has accepted a partnership in a good medical practice at New Durham, and a host of Ayr friends join in wishing him every success.

DR. WATT, of the William Head quarantine station, in British Columbia, has been east with Dr. Montizambert inspecting the Lazaretto at Tracadie, N.B.

CANADIANS will regret to learn that Dr. James Stewart, Professor of Medicine in McGill University, is dead by a stroke of paralysis a short time ago.

DR. H. A. STEWART, of Saskatoon, has been offered the appointment of neuropathologist and lecturer in pathology in the Indiana State Hospital at Indianapolis.

A SYNDICATE of eastern medical men and a prominent medical practitioner of Winnipeg have purchased 14,000 acres on Manitoba Lake for a consumption sanatorium.

OF 319 samples of milk taken from all over the Dominion, and analyzed by the Dominion analyst at Ottawa, forty-five samples were adulterated and eighty-five were doubtful.

DR. J. L. ROBINSON, Montreal, has been appointed Medical Superintendent of Vancouver General Hospital.

DR. ROLLINS, formerly of Exeter, is now located at Raymond, Alberta, having removed there from Prince Albert.

ADDITIONS will be made to the Montreal General Hospital. Eighteen thousand dollars has been paid for 18,000 square feet of land, and the cost of the building will be about \$15,000.

DR. EASTWOOD, of Claremont, died somewhat suddenly in that town lately. The deceased was an old and widely known medical man throughout the southern part of the county and in Uxbridge.

Dr. T. K. HOLMES, Chatham, Ont., narrowly escaped death from drowning a short time ago. Returning at night from a call, he stepped off a bridge, but luckily caught on a pier, until help arrived.

DR. S. J. BOYD, who has recently returned from the Old Country, has taken Dr. Dean's practice in Richmond Hill. Dr. and Mrs. Dean are removing to Toronto. Their residence will be at Kew Beach.

DR. J. MACWILLIAM has disposed of his practice and property in Thamesford to Dr. W. F. Babb, who has been his assistant for some time past. During the twenty-five years that Dr. MacWilliam has practiced he has been most successful, and has become one of the leading physicians of Oxford county, and deep regret is felt at his departure from the village. As a business man he was in the front rank, ever ambitious and ever ready to lend his assistance in every good work and cause for the welfare of the residents of the village and the entire community. We trust that continued success will attend his efforts wherever he may be. Dr. and Mrs. MacWilliam and family intend moving to their new home at London, and they carry with them the best wishes of a host of friends.

BRITISH COLUMBIA has now on hand \$22,500 for a consumption sanatorium. The Lieutenant-Governor has given \$10,000; the Provincial Government, \$5,000, and the C.P.R., \$5,000. One hundred thousand dollars is required.

THE session for 1906-1907 began in the Medical Department of Toronto University on the 3rd inst. Sir Alemroth E. Wright, M.D., F.R.S., London, England, delivered the opening lecture, his subject being "Inoculation with Bacterial Vaccines." There is a freshman class of 179.

DR. CHARLES MONOD, Paris, France, has been visiting in Montreal, and has been the guest of Dr. E. P. Lachapelle. Amongst others who entertained him were Sir William H. Hingston, Justice Mathieu and the Medical Faculty of Laval University, the latter at the Lafontaine Club.

TORONTO MEDICAL SOCIETY.—The opening meeting took place in New Medical Building, Thursday, October 4th, 1906. The programme was: President's address, Dr. Rudolf. "Factors in Coagulability of the Blood and Their Practical Significance," Sir A. E. Wright, M.D. (Dub.), F.R.S., etc., of London, Eng.

WE regret to have to announce the death of Dr. J. M. Le-fevre, of Vancouver, which took place in that city after an illness of eight days. The doctor was fifty-three years of age and had practiced in Vancouver since 1886. He was manager of the British Columbia Telephone Company and chief surgeon to the Canadian Pacific Railway western lines.

THE per capita consumption in Canada of alcoholic liquors and tobacco during the year ending June 30th, 1906, was as follows: Gallons, spirit, .927; beer, 15.660; wine, .698; tobacco, pounds, 2.991. This is a decrease in spirits and an increase in beer, wine and tobacco compared with previous years. The duties paid were at the following per capita rate: Spirits, \$1,939; beer, \$2.46; wine, \$0.54; tobacco, \$1,135.

THE Ontario Government has appointed the following Health Board: Drs. Charles Sheard, Toronto; M. I. Beeman, Newburgh; J. W. S. McCullough, Alliston; Chas. B. Coughlin, Peterboro'; Wm. J. Robinson, Guelph; Wm. R. Hall, Chatham. Dr. Sheard is to be chairman and Dr. Chas. Hodgetts will continue to act as secretary.

DR. GEO. L. MCKINNON has decided to commence the practice of medicine in Hillsburg. Dr. McKinnon is an Orangeville boy, and graduated from Toronto University last spring. His father, the late Dr. A. H. McKinnon, practised in Hillsburg some years ago.

SIR JAMES AND LADY BARR, Sir Thomas and Lady Barlow and son, were the guests of Dr. Allan Adams at luncheon during the recent visit of the British Medical Association to the Consumptive Sanitoria at Gravenhurst. Dr. Barlow, after a thorough inspection of the "Free Hospital for Consumptives," personally congratulated Dr. Adams on the excellent institution over which he is acting physician in charge.

Publishers' Department

SEVERE BURN FROM VAGINAL DOUCHE.

BY C. LAMBERT, M.D., NEW YORK CITY.

The case I present I consider of special significance, emphasizing, as it does, the danger attendant upon the use of toxic and irritating solutions, especially in thoughtless and careless hands, and also demonstrating the value of a solution of a non-toxic and non-irritant nature, such as has been brought to a state of perfection in Glyco-Thymoline.

I was hurriedly called to see Mrs. M., aged 22, whom I found suffering from a most severe burn involving the vaginal mucous membrane, the epithelium of which was completely denuded, while the perineum and adjacent parts had also suffered quite a loss of epidermis. The destructive process in the vaginal tract extended through the superficial fascia and was quite painful. She had, it seems, obtained a curbstone prescription from a medical acquaintance whom she met on the street a few days previous. Her mind, however, became confused and the proportions as were directed, *i.e.*, one dram to two quarts of water, were just the reverse of what she did use, *i.e.*, two drams to one quart of water, resulting when applied as stated above.

I at once administered a vaginal douche composed of two ounces of Glyco-Thymoline to two pints of tepid water, after which I applied a layer of cotton or loose tampon saturated with pure Glyco-Thymoline within the vagina, and a dressing of the same was applied to the perineum, etc. The tampon I did not renew until forty-one hours later. A call out of the city, at which I was detained, prevented me from removing it at the end of twenty-four hours as I had intended to do, and it was with no little misgiving that I hastened to give it my attention. It was, however, only another exhibition of one of Glyco-Thymoline's most valuable properties, as the cotton was as sweet and clean as regards all odor, etc., as when applied, and since then I have frequently assured myself that the preventing of decomposition of the discharges is a most valuable attribute of Glyco-

Thymoline. The same dressing, vaginal and otherwise, was repeated at this visit, and at the next I found such decided improvement, the tissues in so healthy a state, that I merely ordered a continuance of the vaginal douche twice a day of Glyco-Thymoline, one ounce to one pint of water, which treatment at the end of another week effected a cure.

I CAN speak in the highest terms of Resinol Soap. It is a superior head wash—just the thing for shampooing, as it cleanses the scalp thoroughly without injury. It is also the best Soap to use in cases of real Eczema. In fact, it is the best Soap for all toilet purposes.—Luigi G. Doane, M.D., Brooklyn, N.Y.

TONGALINE represents a complicated prescription and some of its ingredients are very expensive, but all have been most carefully selected, are fresh and pure, and are so skillfully combined by the most improved processes, that the full therapeutic strength of each drug is secured, giving one of those happy and fortunate pharmaceutical products which has made Tongaline a standard remedial agent for twenty-five years. It would be utterly impossible for any such results to be obtained by hastily compounding an extemporaneous prescription even if all of the ingredients were of the finest and purest, which is not apt to be the case. As much depends upon the manner in which the ingredients of Tongaline are compounded as upon the character of these drugs, and years of experimentation have taught its proprietors the most successful method of putting these ingredients together. In almost every instance where the expected results have not been secured from the use of Tongaline, it has been found that the genuine preparation was not dispensed. The wonderful success of Tongaline has naturally encouraged many imitations possessing little, if any, intrinsic merits. Every physician should therefore protect himself and his patients from worthless substitutes by prescribing Tongaline in original packages, or take care that his prescriptions are dispensed by honest and reliable druggists.

DR. W. H. BARNETT, of Huffins, Texas, in the *Alkaloidal Clinic* for November, 1904, says: I am satisfied that ecthol, a combination of echinacea and thuja, will prevent the sting of

bees from hurting him. Let him take dram doses every hour for three hours before he commences to work with them. The reason for the faith that is in me is this: They used to hurt me. Last summer I was taking it for a skin disease, and while under its influence I was stung by a wasp on the face and neck. When stung I started to the house to get something to stop the pain and swelling that I expected to suffer with, but instead of pain and swelling, as heretofore when stung, there was no more of either than a mosquito or gnat would have caused.

I FIND Resinol Ointment the best preparation on the market for Pruritus, and use it with very satisfactory results for itching piles.—H. C. Card, M.D., Hartford, Conn.

HALF-COOKED STARCHES A CAUSE OF INDIGESTION.—Digestive disturbances are due more frequently to failure of digesting carbohydrates than other food products. Raw starch is particularly indigestible, the heat of cooking being necessary to break up the granules and to perform the first three of the five steps of starch digestion, after which the normal digestive juices will complete the work. The method of cooking is very important as most cases of amylaceous dyspepsia are due to eating improperly cooked starches. Here is best seen the beneficial results of the extended steam cooking through which Egg-O-See is put, the free action of the diastase ferment and the baking at high temperature. Toast is considered more digestible than bread as it is baked *en masse* and then dry cooked in slices. *Each flake of Egg-O-See, thin as fine paper, is toasted* to a crisp and delicate brown. These dry flakes are so readily affected by the ptyalin that the final transformation of starch into grape sugar in the intestines is so easily accomplished as to cause no distress to the patient who finds it impossible to eat bread and other cereal foods which are not only difficult of digestion but cause painful fermentation. Egg-O-See is so easily digested that it is of special service to the dyspeptic, to those convalescing from acute diseases, in pregnancy where nausea and vomiting are easily induced by food, and in other forms of gastric neuroses.

Doctor, if you have not eaten Egg-O-See a sample package will be sent free on application to the Egg-O-See Cereal Co., Quincy, Ill.

WE regard your Resinol Soap and Ointment as wonderfully efficient in the cure of dandruff. I prescribed them for a sufferer from this disease who had been badly affected for many years. Only two applications daily for a period of three weeks cleansed the scalp completely, and no evidence of recurrence is apparent.—James Bradley, M.D., Ames, Iowa.

LIQUID MEDICINES VS. PILLS, TABLETS AND GRANULES.—Despite the pernicious activity of manufacturers of ready made pills and tablets in flooding the market with all possible substitutes for tinctures, fluid extracts and solutions, it has been amply demonstrated that these solid forms of medicine cannot compare in efficiency or in usefulness with the equivalent preparations given in liquid form.—*Jour. of Amer. Med. Assn.*,—June 23, 1906.

FOR twenty-five years Tongaline in its various forms has been endorsed by thousands of physicians for many diseases, such as rheumatism, neuralgia, grippe, gout, nervous headache, sciatica, lumbago, malaria, dengue, tonsillitis, heavy colds, indefinite pains, growing pains and excess of uric acid. "The purest form of salicylic acid is obtained from the oil of gaultheria. That made from carbolic acid has so many objectionable features that its usefulness is largely counteracted, and in fact it is surpassed in value by other agents. It disturbs the stomach, depresses the heart and may injure the kidneys. It is liable to cause headache and vertigo." Extract from an address delivered before the York County, Pa., Medical Society, June, 1905, by John V. Shoemaker, M.D., LL.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine in the Medico-Chirurgical College of Philadelphia. All the salicylic acid in Tongaline is made from the purest natural oil of wintergreen, hence in prescribing Tongaline, physicians can always rely on giving their patients the gaultheria salicylic acid, provided the genuine Tongaline is dispensed.

MY wife has been a sufferer with chronic Eczema for the past twelve years. It first appeared on one side of her face and gradually extended over her body. I tried every remedy that I could find recommended in medical literature and by eminent authorities

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVII. TORONTO, NOVEMBER, 1906.

No. 5.

Original Articles.

ABDOMINAL OPERATION FOR THE RELIEF OF UTERINE RETROVERSION.

BY J. B. EAGLESON, M.D., SEATTLE, WASH.

Hippocrates used posture for reducing uterine displacements by fixing the body to a ladder which was held with head down while the uterus was replaced by manipulation. "He further advised that when the uterus did not remain in its proper place, but goes from side to side, it occasions pain. When the patient is in bed on her back the uterus remains in place, but if she rises it slips down. Rest, astringent fomentations, and the raising the foot of the bed, are steps to be employed in the treatment. Then we should take a pomegranite, its shape being chosen to suit the parts, and we should divide it down through the umbilicus into two halves. Then warm it in lukewarm wine, after this thrust it as far as possible (into the vagina) and then bind the patient with a large sling bandage, which restrains it below and prevents it from slipping out, and so it can fulfil its office."

Thus we have described the first astringent pessary worn for uterine support, and from that time down through the centuries the pathology and treatment of this very common disorder of woman improved but little.

S. D. Gross, one of the ablest surgeons that America has pro-

*Read at annual meeting of British Columbia Medical Association, in August, 1906.

duced, in the fourth edition of his system of surgery published in 1866 states that the "treatment of retroversion must obviously be of an antiphlogistic character, consisting of rest in the recumbent position, light diet, astringent and cooling injections into the vagina and rectum, and the application of leeches to the hypogastric and sacro-lumbar regions. When the uterus has become firmly adherent to the surrounding parts, the disease may be regarded as irremediable, though considerable relief may follow the use of a pessary."

In those days the various inflammations of the appendages and pelvic peritoneum went under the general term of cellulitis, which came about as near being the correct pathologic term as the word *hematocele* for the collection of blood in the pelvis from a ruptured ectopic pregnancy.

Before the advent of abdominal surgery the pathology of pelvic disorders was in a very chaotic state, together with most all diseases of the abdominal organs. Since the modern development of abdominal work we are rapidly revising our pathology at the operating table instead of in the post-mortem room. In other words, we are beginning to have a living pathology instead of a dead pathology.

The result has been that the treatment of uterine retro-displacements has changed from a medical and palliative one, to a surgical and radical one, much to the comfort and health of our patients.

I do not mean by this that the day of the hot douche, tampon and pessary is past, for many cases are relieved and possibly some cured by these methods, and I believe that in many cases we get better and more prompt results in our operative work by a preliminary course of palliative treatment.

In a simple uncomplicated retro-displacement which is well retained by a pessary the woman should be permitted to choose between the permanent use of such a support and a radical cure, since no operation is absolutely devoid of all risk. In such cases all lacerations and inflammatory conditions of the cervix should be overcome and a well fitting pessary inserted and the patient given full instructions for the care of herself, with a warning to report at intervals for the inspection and alteration in size or shape of the support, in case the same should become necessary.

In complicated cases, or when the patient herself chooses to accept an operation, we are at once embarrassed by the multitude of operative procedures which have been devised for the sure cure of this displacement.

Goffe divides them into two classes: First, those which utilize the ligaments of the uterus, and, secondly, those which fasten the fundus or body of the uterus directly to some sustaining tissue. The first class are shortening the round ligaments by pulling them out of the inguinal canals, the Alexander-Adams method, with modifications, and the intropelvic shortening of the round ligaments by folding them on themselves and stitching them in that position. This may be done through an abdominal incision, as per Wylie, Mann, Dudley, Webster and others, or through a vaginal incision, as per Dührssen, Mackenrodt, Byford, Goffe, Bovee and others, or by the plan of attaching the round ligaments to the abdominal wall, as per Noble, Ferguson, Simpson, Gilliam, Barrett and others. In the second class are: Suspending the fundus uteri from the anterior abdominal wall, as per Olshausen, Tait, etc., suspending the fundus uteri from the abdominal peritoneum, ventrosuspension of Kelly, stitching the fundus to the anterior vaginal wall, vaginal fixation of Schucking and Dührssen, and shortening the utero-sacral ligaments, either through the abdominal or vaginal incision as practiced by Goffe and Bovee. Out of this list one must choose a method according to his best judgment and with a knowledge of his own skill, thinking always of the ultimate result on the patient.

Before any operation is undertaken a correct diagnosis should be arrived at, if possible, for upon a correct knowledge of the pathologic condition in each case depends the success to be attained by the procedure. We must remember that but very few cases of retro-displacements are simple; in fact, I have almost come to believe that none are, for "co-existent with the displacement, we may have adhesions of many kinds, inflammations, pustules, cystomata, fibroids of the uterus, varicose conditions of the uterine veins, and numerous other complications. Many of these may bear the relation to the retro-displacement of cause or effect, and any operation which does not at the same time relieve these complications will not only fail to cure, but may leave the patient more uncomfortable than before."

Fixation methods either by the abdominal or vaginal route are mentioned only to be condemned, for it means the change from one pathologic condition to what is probably a worse one, and is never justifiable except in women with a severe prolapse, and that only after the child-bearing period.

The Alexander-Adams operation has probably been the most

popular of all operations, but it is limited to the few cases of simple retro-displacement in which there are no complications. To overcome this objection Goldsphon advocated and practiced enlarging the internal inguinal ring and through this opening attacking any pelvic lesions which might be present. This method has, however, been pretty generally condemned on account of the greater liability to hernia following the operation, which according to Goffe, results in from 5 to 15 per cent. of all cases after the simple Alexander operation. What would be more mortifying to an operator than to have a patient upon whom he had operated for the relief of a simple displacement of the uterus return to him in the course of a year or two with a single or double hernia through the Alexander incisions?

The very latest advocate of the Alexander operation, Reuben Peterson, in the July issue of *Surgery, Gynecology and Obstetrics*, gives the following resumé of its disadvantages, viz.:

1. "The operation is limited in its scope, since it must be reserved for perfectly movable, non-adherent uteri. This is a serious disadvantage, since besides limiting the operation to a comparatively few cases, it opens the way to failure should adhesions be overlooked prior to the operation. Every operator must admit such mistakes in diagnosis. Fine adhesions about the appendages and posterior part of the uterus and rectum sometimes escape the most expert examiner. They do not prevent the reposition of the uterus, but they exert a strain in the opposite direction when the uterus is held forward by the shortened ligaments. Pain and discomfort are the result and not relief of the symptoms.

2. Each ligament has to be shortened by a separate incision in the inguinal region. Hence there is a double chance for suppuration. Because of the location of the incision and its liability to contamination, there is more of a tendency to suppuration after Alexander's operation than after other procedures. This has been testified to by many operators and has been borne out by my own experience.

3. Alexander's operation cannot be used as an adjunct to other intropelvic work, since it would necessitate three skin incisions, which for obvious reasons, cannot be considered."

To obviate the last disadvantage, Dr. Peterson recommends using either a vertical or transverse skin incision close above the pubes, through which he not only opens the abdomen by a median incision, for the pelvic work, but also draws the skin wound to either side and

performs the Alexander operation secondarily, thus virtually making three wounds in the abdominal wall through the one skin incision. This method certainly makes a very complicated operation and in no way overcomes the danger of post-operative hernia.

Goffe has advocated making a preliminary vaginal incision to free the uterus and to relieve pelvic conditions.

The main argument in favor of the Alexander operation is that it does not complicate future pregnancies. In performing the operation, however, one is liable to meet with certain unforeseen complications.

Adhesions are sometimes encountered in the inguinal canal, which effectually prevent the drawing out of the cord. The cord is sometimes so delicate that it is unable, when separated from its attachments, to resist the strain and breaks. The rupture sometimes occurs at the horn of the uterus. In few cases the cord has been found not to run through the inguinal canal. All of these complications make it necessary to resort to some other procedure to complete the operation.

The vaginal operations for shortening the round and utero-sacral ligaments, as advocated by Dührssen, Mackenrodt, Goffe, Bovee and others, is very difficult to perform by one who does not possess the highest skill in vaginal work. While its advocates claim that they are able to relieve all pelvic complications by this route preliminary to the main operation, there are still many disadvantages, as well as unforeseen dangers. Even in a case without any complications the vaginal vault has to be seriously mutilated and the bladder attachment separated from the uterus, the pelvic peritoneum torn off the face of the uterus and out into the broad ligaments which cannot be repaired from the vaginal opening, and thus leaves a raw surface which is liable to cause new adhesions as well as a permanent fixation of the uterus.

Suppose we have a case in which there are firm adhesions between uterus, tubes, broad ligaments and perhaps bowel, with a possible involvement of the appendix, which is rather frequent, and you have a condition that would tax the ingenuity of the most skilful vaginal route advocate. Add to the above a perforation of the bowel by an old abscess, so that when the adhesion was freed between tube and bowel an opening was left in the latter, which occurred in a case of mine a few months ago, or a severe intra-abdominal hemorrhage, and the probabilities are that not even the

most expert would recognize the condition, and the patient would either have to undergo an immediate abdominal operation or die from septic peritonitis or internal hemorrhage. No man has a perfect tactile sense or eyes on the ends of his fingers, hence where we have to deal with dense adhesions there is always danger of leaving some unrevealed accident buried in the pelvis. This brings us to the consideration of dealing with retro-displacements of the uterus, by the abdominal route, which, to my mind, is not only the most logical, but at the same time the best surgical door to the pelvic cavity. By it we can use our eyes as well as fingers, and absolutely know the conditions with which we have to deal, and if any part of the operation is left undone, or is wrongly done, it is the fault of the surgeon and not of the method.

"Koeberle, from observing that the uterus was influenced in its position in the pelvis by the attachment of the tumor pedicles in the abdominal incision after laparotomies, conceived the idea of fixing a portion of the uterus, or its appendages, in the abdominal incision as an operation of election for retro-displacements, consequently he was the first to execute such an operation, on March 27, 1869, when he stitched the pedicle of an excised ovary in the lower angle of an abdominal incision. Sims, February 22, 1875, cured a patient with persistent, painful retro-flexion by practically the same operation as that employed by Koeberle. Schrader reported, in 1879, a similar operation."

"On February 20, 1880, Lawson Tait, in closing an abdominal wound after removing the appendages in a case complicated with retroversion, allowed the sutures employed for closing the abdominal incision to include the fundus of the uterus and thus deliberately accomplished a ventral fixation. He reported this case, and another done in April, 1880, as cured in 1883. Sanger reported that Hennig performed this operation in 1881."

This operation has practically been abandoned on account of the difficulties which follow during pregnancy, and should never be resorted to except in cases of severe prolapse in women who have passed the menopause.

The operation of ventro-suspension which has had more ardent advocates than any other until recent years, was originated by Kelly, of Baltimore, in 1885, and will always be inseparably connected with his name.

It has been described so frequently in medical literature that it

is not necessary to mention its technique. Its object is not to fix the uterus to the abdominal wall, but to form suspension ligaments which will hold the fundus forward in its normal position.

The principal arguments in its favor are the ease with which it is performed and that in the majority of cases the results are good. It seldom interferes with the after pregnancies.

The arguments against it are numerous. It produces an abnormal adhesion, a pathologic condition which would be considered a menace to health in any other place in the abdominal cavity. A number of cases have been reported where it has caused intestinal obstruction or severe disturbance with the normal bowel function. The fact that, with the usual technique, two small bands result, makes the danger of incarceration of the bowel or omentum all the more liable. Even with the best of care, a firm fixation sometimes occur. Sometimes the bands stretch out so long that the fundus is again permitted to fall back into the hollow of the sacrum. The bands are practically devoid of muscular tissue, so that when once stretched out by a pregnant uterus they never retract to their original length.

The operation has been modified by the late Geo. F. Fowler, by suspending the uterus to the urachus; and by Martin, of Chicago, who uses a strip of peritoneum from the edge of the abdominal wound, which is passed through a small slit under the peritoneum on the fundus of the uterus. He thus obviates the use of any non-absorbent sutures.

The intra-abdominal shortening of the round ligaments was first suggested by Wylie, of New York, which he did by simply folding the ligament on itself once and stitching it together. This has been modified by Mann, who formed two folds, and by Webster, who made a single fold, and then passed this through the broad ligament and stitched it to the posterior wall of the uterus. Many of these operations give excellent results, but they all have the fault of using the good end of the ligament for folding and leave all the strain upon the very weakest part of the ligament, at the internal abdominal ring.

They do not interfere with pregnancy. Ashton, of Philadelphia, in bad cases recommends the combination of the ventro-suspension and the Wylie operation.

In order to secure the service of the strong end of the broad ligament. Gilliam, Ferguson, Grandin and others advocate the

suspension of the uterus to the anterior abdominal wall by the use of the round ligaments, which are either stitched to the peritoneum or are brought out through a punctured wound made through the rectus muscle and sometimes the fascia.

This method gives excellent results, but is open to the criticism of simply hanging the uterus up by the ears, and leaves a narrow space through between the ligaments which is liable to invite a loop of intestines or a portion of the omentum to become incarcerated. One case was reported some time ago in which about one-third of the omentum got caught in this manner and had to be amputated.

One year ago, C. W. Barrett, of Chicago, reported an operation for retro-displacement, which is simple and yet effectual, and does not present many of the disadvantages of the other methods. It has been slightly modified by C. H. Mayo, so that the present technique is very simple.

After opening the abdomen by the usual supra-pubic median incision, and taking care of any pelvic or other conditions that may be necessary, a large curved Kelly clamp is passed under the aponeurosis of the rectus and external oblique muscles, over the rectus, and out to a point immediately over the internal abdominal ring, where, by raising the handles, the tip of the forceps is made to perforate the abdominal wall behind the exit of the round ligament. By raising the same side of the abdominal wall by a retractor, the point of the forceps can be made to pass inwards and backwards under the round ligament and between the two layers of its peritoneal covering until it reaches a point about $2\frac{1}{2}$ inches from the angle of the uterus, where the forceps blades are opened and made to grasp the round ligament, which can be done either with or without opening the peritoneum at this point. The forceps are now withdrawn, bringing with it the round ligament, which is held firmly until the other one is treated in the same manner. Frequently the loops are long enough so that they can be brought out in the median line and stitched together. If this can not be done without too much tension the loop is sewed to the underside of the aponeurosis with catgut. The abdomen is then closed in the usual manner.

"Tracing the round ligament we now have it running from the uterus to its normal exit, the internal ring, and under the aponeurosis to the lower angle of the abdominal incision, close to the symphysis pubis, to the underside of which aponeurosis it is attached about

one inch from median line or to the middle, if long enough. The ligament now retraces its steps to the internal ring, from whence it follows its normal course to the labium majus."

The ligament thus uses the normal structures for a pulley where it leaves the abdomen, and there are no loops or openings of any kind for strangulation of the bowel. The uterus is now supported by the very best part of the round ligament, where it has the capacity for evolution during pregnancy and involution afterwards.

I have seen but one criticism of this operation and that is in case of infection of the wound the suppuration might travel out along the round ligaments in their new course and thus lead to deep abscesses, but of this I think there is very little danger. Its originator claims the following advantages for this operation, all of which I think are very justly made, viz.:

1. It may be employed where there are intra-abdominal complications of any extent, and through the best possible opening for dealing with them.
2. It is easy of execution through even a very small opening.
3. It creates the least possible pathology, forming no new ligament.
4. It utilizes the very best part of the round ligament, acting through the internal ring.
5. It has shown the highest efficiency in holding the uterus forward and yet allowing the normal range of movement.

In case it may be deemed necessary to supplement it by a shortening of the sacro-uterine ligaments, this can easily be done at the same operation.

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DIRECTIONS FOR NURSE AND HOUSE PHYSICIAN, BURNSIDE LYING-IN HOSPITAL, TORONTO.

DIRECTIONS FOR NURSE.—PATIENT ON ADMISSION.

Have the patient undressed at once, and her cast-off clothing placed in a receptacle, from which it is to be taken for fumigation.

Let her then take a warm tub-bath, after which she is to be dressed in hospital clothing.

Then make a record of her pulse, temperature and respiration.

Take pulse and temperature morning and evening while "waiting," and record everything abnormal.

PREPARATION AFTER ONSET OF LABOR.

Give soapsuds enema.

Give warm bath.

Let patient then put on a nightgown and remain in bed until examined.

Prepare delivery room and table.

Have at hand sterile towels, gauze sponges, absorbent cotton balls, thread for cord, three basins for solutions of sterile water, mercury bichloride, and lysol or cresoline, scissors, and two clamps.

Place small portable table near bed and operator.

FURTHER PREPARATION OF EXTERNAL GENITALIA.

After patient is placed on operating table:

Put Kelly's pad under buttocks.

Cut short all hair at sides of vulva, and all hairs above long enough to reach the vulva.

Give a vaginal douche of green soapsuds at about 110 degs. F.

Scrub the lower abdomen, pubes, vulva, perineum, buttocks and thighs, using green soap; then wash with warm sterile water, then with bichloride solution.

During the scrubbing process, wash from before backwards, *i.e.*, towards the anus.

Then place a bichloride guard over the vulva.

If labor is advancing too rapidly to allow all these procedures, omit the douche, but, if possible, cut short the hairs at side of vulva, and wash vulva and adjacent parts.

Then remove the Kelly pad, and place under back, buttocks, and thighs a fresh sterilized draw-sheet, and an absorbent gauze pad under the buttocks.

In prolonged labor give a second rectal enema in twelve hours after the first.

If there is any operative interference, wash the external genitalia again, and put on the Snively stocking-drawers.

The patient's legs are then to be held or fastened with leg-straps, as directed by the operator.

Catheterize only when directed by the obstetrician, the house physician, or head nurse.

MANAGEMENT OF PATIENT AFTER LABOR.

Wash the external parts first with warm sterile water, then with bichloride solution, then cover with bichloride pad retained in place by T-bandage, or fastened to binder when applied.

Change vulvar pad as often as necessary, *i.e.*, before it becomes saturated with blood, sometimes every hour, for a few hours; after one day, every four to eight hours for a week.

When changing pads, wash the parts with a bichloride solution for seven days, and with soap-water after seven days.

Give a cathartic on the evening of the day after labor.

Note the height of the fundus uteri, and keep the daily involution line.

Prop up on pillows the head and shoulders for a few minutes, twelve hours after labor, and afterwards three times a day for seven days. Allow patient to sit up and void urine on and after second day, if she desires, unless there has been a perineorrhaphy, in which case the nurse will be instructed by the attending obstetrician. Allow her to sit up in bed on and after the fifth day, if she desires. Do not allow her to get out of bed earlier than the tenth day, and not then if the fundus is still above the pubes, unless by order of attending obstetrician.

ECLAMPSIA BEFORE, DURING, OR AFTER LABOR.

Remove false teeth, if present.

Prevent patient from injuring herself; use several pillows as buffers.

Prevent her from biting her tongue, by covering an ordinary clothes-pin or large spoon handle with gauze, and holding it between the teeth during convulsion.

Darken room if possible, and keep the patient very quiet.

If there is much blood or mucus in mouth and throat, turn

patient on her side, with head in a position to allow liquids to run out of the mouth.

HEMORRHAGE BEFORE OR DURING LABOR.

Keep patient absolutely quiet; elevate the foot of the bed.

THE NEW-BORN BABE.

Weigh the baby at once, anoint with albolene, examine the cord for bleeding, the head for meningocele, etc., the back for spina bifida, etc., the limbs for talipes and other deformities, the whole body for birth-marks, etc.; notice if babe turns blue, and examine for imperforate anus.

Bathe the babe as soon as convenient, and thereafter every day; apply dry dressing with boric acid over cord, remove this dressing and apply a new one after each bath.

If babe weighs less than five pounds, anoint with albolene and wrap in flannel or cotton wool, or both, taking care to keep it very warm until ordered by the attending obstetrician to wash and dress it.

Let babe nurse every six hours during first day, every four hours during second day, and every two hours for twenty minutes during third day, and thereafter, except at night, when he should nurse at half-past ten, half-past four, and in morning, half-past eight.

Take the temperature twice every day.

Weigh baby before each daily bath.

DIRECTIONS FOR HOUSE PHYSICIAN.

Examine each patient on day of admission, especially as to condition of heart, lungs and kidneys, and also general health and record.

If there is any nasal or vaginal discharge, have a bacteriological examination made, and record the results.

Examine by abdominal palpation for position and presentation; also make external measurements by pelvimeter; record results as to both palpation and pelvimetry.

Examine specimen of urine furnished by nurse on day after admission, and every seventh day thereafter up to time of labor, and daily if there is headache, nausea, anasarca, or any other abnormal condition.

PREPARATION OF ATTENDING OBSTETRICIAN AND RESIDENT PHYSICIAN.

Cut the nails short; wash hands and arms in hot water, using green soap and nail-brush; cleanse well under and around

nails; rinse in sterile water and then in a one per cent. solution of lysol or cresoline. Keep one of these solutions in a sterile basin on the small table beside the operator, and rinse hands from time to time. Put on operating-gown. The attending obstetrician may, and the intern must, wear rubber gloves in making vaginal examinations, which shall be as few as possible.

MANAGEMENT OF PATIENT IN LATTER PART OF LABOR.

Let the patient lie on her left side during the last expulsive pains, and let her turn on her back while the child is being expelled, or immediately after its delivery.

Keep one hand on fundus, press gently or irritate slightly with finger-tips, without using force.

After separation and passage into vagina, or after thirty minutes, endeavor to express placenta by pressure on fundus.

If placenta is retained, send for attending obstetrician, but in case of emergency, such as serious hemorrhage, introduce gloved hand and extract.

In all other cases of retained placenta, place a bichloride guard over vulva, and wait until an attending obstetrician arrives, but at the same time watch for hemorrhage.

Tie cord after pulsation has nearly ceased, or in five minutes.

Examine placenta carefully, measure and weigh.

Report all injuries and tears of the soft parts to an attending obstetrician, who shall treat or instruct as to treatment.

MANAGEMENT OF PATIENT AFTER LABOR.

See that directions for the nurses are properly carried out.

See that patient gets a cathartic on the evening of the day after labor.

Watch carefully the uterus for involution.

Keep patient in bed not less than nine full days.

DIRECTION FOR CASES OF EMERGENCY.

Eclampsia.

Use mouth-wedge at once.

Give hypodermic of morphine at once, half-grain, also another hypodermic, quarter-grain, in half an hour, and a third hypodermic in one hour if convulsions are not controlled in the meantime.

See that patient is kept very quiet, and protected from cold and drafts.

If the patient becomes conscious, give calomel, 3 grains, as soon as possible, and magnesium sulphate, 2 drachms, every half-hour.

If not effectual within two hours, order 1, 2, 3 enema (Epsom salts 1 ounce, glycerine 2 ounces, water 3 ounces), and also continue salts by the mouth until bowels are well moved.

After bowels are evacuated, administer high enema of salt solution, one pint every hour until three pints are injected, or use colon irrigation, if directed by attending obstetrician.

Apply hot packs on kidneys.

HEMORRHAGE BEFORE OR DURING LABOR.

Keep patient absolutely quiet.

Elevate foot of bed.

Give hypodermic of morphine, quarter-grain.

Repeat hypodermic of morphine, quarter-grain, in fifteen to thirty minutes if necessary.

Give adrenalin 1-1000 solution, M. 10 by mouth or M. 5 hypodermically. If serious bleeding continues, and membranes are unruptured, plug the vagina, keep pressure over fundus uteri, and give three salt solution enemata, one pint each, at intervals of one hour.

HEMORRHAGE AFTER LABOR.

Massage fundus uteri so as to express clots.

If uterus cannot be well contracted, and hemorrhage is alarming, introduce the gloved hand into uterus, clear out clots, and irritate uterine walls with finger-tips, and massage externally.

If the uterus is well contracted, and serious hemorrhage continues, look for bleeding-points in lacerations of perineum, vulva, pelvic floor, other parts of vagina, and cervix.

USE OF FORCEPS.

No house physician shall use the forceps without the permission of an attending obstetrician.

Do not apply the forceps until the cervix, vagina, vulva, and perineum are dilated and softened.

After dilation, apply the forceps within three hours in primiparæ, and within two hours in multiparæ, if nature has not completed delivery.

In using traction on handle attached to traction-rods, pull intermittently, and if considerable force is required, occupy not less than twenty to thirty minutes in delivering the head, taking the time from a watch or clock.

As soon as the head commences to press on the pelvic floor, remove leg-holder and allow extension of the thighs, etc., allow legs and thighs to hang over the end of the labor-table.

THE USE OF ANESTHETICS.

No house physician shall administer an anesthetic without the permission of an attending obstetrician.

In all serious operations, and in all operations on patients in a serious condition from disease or other cause, an official anesthetist shall administer the anesthetic.

The term "attending obstetrician" refers to the individual members of the visiting Burnside staff, and to all physicians who have charge of patients in the private wards.

All obstetricians in charge of private patients are requested to observe these rules.

Examine every male child on the seventh day after birth, to ascertain the condition of the prepuce. If found adherent, "strip" the glands, and secure, if possible, a prepuce freely movable. If this cannot be done after using the prepuce-forceps, and a probe or director, report to an attending obstetrician, who shall see that circumcision is done if required.

During labor and the puerperium, record, or let nurse record, as far as possible, the following: Length of first stage, length of second stage, length of time before expulsive pressure is used over the fundus of the uterus, length of time of such pressure, total length of third stage, time of washing of vulva, time of application of abdominal binder, time of putting patient in bed, time of first weighing baby, time of first washing baby.

In forceps delivery, record when forceps are applied, when head is extracted, when body is expelled or extracted.

In all other operative procedures record length of time of operation.

REMARKS.

When Solon gave laws to the Athenians, he was asked, "Are these the best laws you can frame?" He answered, "No; but they are the best laws that the Athenians can keep."

We have endeavored to profit by Solon's wisdom, and have tried not to frame rules that are too elaborate. The tenure of office of our nurses and house physicians is very short, and the frequent changes make the training of the staff somewhat difficult. We find that a printed set of rules, which are to a large extent similar to those used in other maternities, especially in the United States, is very serviceable in many respects. We have made our rules simple, and we hope they will prove useful for our young graduates.

We have considered for several years that it is difficult or impossible to keep the Kelly pad perfectly sterile, and we use it only to a limited extent. We, therefore, remove the Kelly

pad after preparing the patient for labor, and place under the patient a clean draw-sheet and an absorbent gauze pad.

For many years we used no vaginal douche before or after labor in normal cases. Recently, however, we commenced the administration of the antepartal douche, as was the custom years ago in the Burnside. We do not use a douche of any kind after labor, unless there is some special indication for it.

Our rule as to the vulvar pad after labor is to change it as *often as necessary*, instead of every four or six hours, as was once our custom. Our aim is to change the pad before it has become saturated with blood, *i.e.*, before the bed-clothing has become soiled. Frequent changes, sometimes every hour, are generally required during the first twenty-four hours after the completion of labor.

We administer a cathartic earlier than we did a few years ago, with benefit, we think, to our patients. The height of the fundus is noted daily, and the involution line has been carefully kept on our ordinary charts for the last six years, according to the custom of Queen Charlotte's Hospital, London, England: The head and shoulders are propped up on pillows for a few minutes three times a day, to favor free vaginal drainage.

In cleansing the hands of the obstetrician, and the genitalia and adjacent parts of the patient, we have discarded alcohol, for two reasons. Its use involves considerable expense and some inconvenience, especially for the general practitioner who does not, as a rule, carry alcohol in his obstetrical satchel. So far as our observations show, we get along as well without it.

As to antiseptics, we still use the bichloride of mercury to a large extent. We have used lysol for some years, and are now using cresoline to a limited extent. Professor Amyot, of Toronto University, conducted a series of experiments for us last winter, and found that the germicidal powers of lysol and cresoline were strong. They are both commercial preparations, somewhat similar in nature, being saponified cresol mixtures.

In fixing a time limit after the Dublin fashion, we do not mean that in all cases the operator should wait for two or three hours after complete dilatation before applying the forceps, but we do mean that he should never wait longer.

Our chief aim in making rules as to certain time records is to secure uniformity in methods of procedure. For instance, we don't want a muscular and strenuous house physician to pull the head over the pelvic floor and through the vulva in five minutes. We don't want him to guess as to time, but use his watch, or the clock on the wall beside him, so as to know what progress he is making in a given time.—A. H. W.

Clinical Department.

A Case of Intestinal Obstruction. FRANK S. HOUGH, M.D., Sibley, Iowa, in *J.A.M.A.*

I have made no extensive examination of the literature of intestinal obstruction, but from the nature of this case I believe that it is a rare one.

History.—Mrs. A., aged 30, married one year, was operated on by me two years ago for destructive disease of the appendages. Nine years ago she suffered from pus tubes and general pelvic inflammation. Both ovaries were mere sacs filled with soft necrotic material, and all the other evidences of long-continued inflammations were present. She was a physical wreck. For about a year she suffered severely from the artificially-induced menopause; after that she commenced to put on flesh and became, apparently, the picture of health.

Present Illness.—On the evening of May 9, she partook liberally of sauerkraut. She returned home and retired with a feeling of well being. Some hours later, after midnight, her husband saw that she seemed ill, as she was groaning and rolling about though still asleep. He aroused her and she said that she had a great abdominal pain; the abdomen was found to be swollen. Soon she commenced to vomit and the pain increased in severity. I was summoned some time later and was loth to diagnose obstruction because one classical symptom, the element of shock (as registered by pulse, temperature and skin) was wanting. The patient vomited incessantly for sixteen hours.

Treatment.—I made many unsuccessful attempts to pass a long colon tube, but at last my efforts were rewarded by such an immense discharge of gas and feces that I thought, and told the family, that things were now all right. The pain and vomiting stopped for an hour and then the same symptoms returned and I found that I had only emptied the colon and that the small intestine was still enormously distended. I suspected volvulus near the lower end of the cecum.

Operation.—An eight-inch incision was made through the right rectus and was followed by evisceration of practically all the ileum, which was greatly distended and cyanotic. Not having a Paul's tube or other similar contrivance, multiple incisions were made in the bowel which allowed of evacuation of contents. The emptied bowel was sutured and returned. The cecum was located and an

effort was made to elevate it and the adjacent ileum, but it could not be done. The constriction could be felt, however, and a distended black loop of bowel was fished up. A white glistening cord was apparently tied around it. This cord was round, about three inches in length and the size of one's little finger, resembling somewhat a thick fibrous appendix. The herniated loop could not be extricated until the cord was excised. By the application of hot wet compresses the strangulated bowel changed in color from black to rosy red, and no portion of the bowel was removed as its mesentery seemed all right and it had resumed a contracted natural appearance.

Result.—The patient did not vomit after the operation and on the second day she commenced to pass large quantities of liquid feces. The abdomen flattened and became normally tympanitic. Her recovery was rapid. She required cascara and epsom salts almost daily for two or three weeks before the bowels regained a normal condition.

The condition was of the nature of an intra-abdominal strangulated hernia. This cord was attached at one end to the bowel wall furthest from the mesenteric attachment, and to the adjoining mesentery near the bowel, so that a ring existed whose circumference was cord, bowel and mesentery. The diameter of this ring was one and one-half inches. This old adhesion was about six inches proximal to ileocecal valve, and on inspection another one almost identical in appearance was found a few inches proximal to that which was excised to prevent subsequent trouble. These bands were undoubtedly the vestiges of her peritoneal inflammations years ago, and were there when I operated on her pelvic organs two years ago, but no search was made in this region at that time. She might have carried them around with her for years without suffering any inconvenience had not an unaccustomed dinner, and perhaps more especially the sauerkraut, excited violent peristalsis, and the ileum being thrown into violent action became strangulated by this band.

Strangulated herniæ through the omentum, diaphragm and together and cause obstruction, and adhesions do the same by crossing the intestine. Such a case as this seems to me to be very rare. Had operation been delayed longer her chances would have been small, and my delay was due to the fact that I was unable to reconcile an unaffected pulse of 75, warm extremities, natural skin and no apparent depreciation of strength with volvulus or other form of obstruction, in spite of the distension, pain and vomiting.

Society Reports.

CANADIAN MEDICAL ASSOCIATION REPORT OF SPECIAL COMMITTEE ON RE-ORGANIZATION.

CONSTITUTION.

Article I. Title.—This society shall be known as the Canadian Medical Association.

Article II. Objects.—The objects for which the Association is established are the promotion of the medical and allied sciences, and the maintenance of the honor and the interests of the medical profession by the aid of all or any of the following:

(a) Periodical meetings of the members of the Association, and of the medical profession generally, in different parts of the country.

(b) By the publication of such information as may be thought desirable in the form of a periodical journal which shall be the Journal of the Association.

(c) By the occasional publication of transactions or other papers.

(d) By the grant of sums of money out of the funds of the Association for the promotion of the medical and allied sciences in such manner as may from time to time be determined.

(e) And such other lawful things as are incidental or conducive to the attainment of the above objects.

Article III. Membership.—The Association shall be composed of ordinary and honorary members. Ordinary members must be regular practitioners in some province of the Dominion of Canada. Honorary members must be persons who have distinguished themselves and risen to pre-eminence in medicine, the allied sciences, in literature or in statesmanship.

Article IV. Affiliated Societies or Associations and Branch Associations.—All provincial, inter-provincial, county, city or district medical societies or branch associations at present existing in the Dominion of Canada, or which hereafter may be organized in the Dominion of Canada, may, by special resolution of said Medical Society or Association, become branches of or affiliated with the Canadian Medical Association, by subscribing to its constitution, by-laws and code of ethics.

Article V. Executive Council.—The Executive Council shall be the business body of this Association. It shall consist of delegates elected by the affiliated societies or associations or branches, by the Dominion and Provincial Boards of Health, and by the Canadian Medical Association as hereinafter provided for in the by-laws. It shall elect all the officers of the Association, except the president, by ballot, and transact all the general business of the Association. The president and general secretary shall be members of the Executive Council, and they shall act in the capacity of president and secretary of the same.

Article V. Sections.—Sections may be provided for by the Executive Council, or as hereinafter provided for in the by-laws.

Article VII. Meetings.—The meetings of the Association shall be held annually, at such time and place as may be determined by the Executive Council. Special meetings of the Executive Council shall be called by the president upon a written requisition stating the objects of such meetings and signed by twenty members of the Executive Council.

Article VIII. Officers.—Sec. 1.—The general officers of this Association shall be a president, a vice-president for each of the provinces of the Dominion of Canada, a local secretary for each of the provinces of the Dominion of Canada, a general secretary and a treasurer. The president shall be nominated by the Council and elected by the Association in general session.

Sec. 2.—The offices of general secretary and treasurer may be held by one and the same person.

Sec. 3.—These officers, excepting the president, shall be elected annually by the Executive Council to serve for one year or until their successors are elected and installed in office.

Sec. 4.—The treasurer shall give a bond to the Finance Committee for the safe-keeping of all funds in his possession and for their proper use and disposal.

Article IX. Finance Committee.—The Executive Council shall annually appoint five of its members as a Finance Committee, which shall also be a Publishing Committee, and whose duties will hereinafter be provided for in the by-laws.

Article X. Funds.—Funds for the purposes of the Association shall be raised by an equal annual assessment of \$5.00 upon each ordinary member; from the Association's publications, and in any other manner approved of by the Finance Committee. These funds, from whatever source derived, are to be transferred to the treasurer, by him deposited in some responsible banking institution, and only paid out by him on the order of

the general secretary and the Finance Committee, through its chairman.

Article XI. Amendments.—No amendments to any of the foregoing articles or sections thereof shall be made, unless due notice has been given in writing to the general secretary at the previous annual meeting. Any such notice of motion must be laid by that officer before the Executive Council and sanctioned by a three-fourths vote of that body before it is adopted as a part of the constitution.

BY-LAWS.

Article I. Membership. Section 1. Membership. How Obtained.—A member in good standing of an affiliated medical society or association may become a member of the Canadian Medical Association by presenting to the general secretary: (1) A certificate of membership in good standing in an affiliated or branch society or association, signed by the president and secretary thereof; (2) written application for membership on the approved form; (3) payment of the annual subscription. In the absence of membership in a local association or branch a candidate may be elected to membership by the Council on the nomination of two members from personal knowledge.

Section 2. Membership. How Retained.—So long as a member conforms to the by-laws of the Canadian Medical Association, he retains his membership therein.

Any member who fails to conform to the by-laws and whose subscription shall not have been paid on or before the 31st December of the current Association year shall, without prejudice to his liability to the Association, be suspended from all privileges of membership, and at the end of the succeeding year, if the arrears be still unpaid, he shall *ipso facto*, cease to be a member. No member shall (except in case of his death or expulsion, or of his ceasing to be a member under the previous provisions of this article) cease to be a member without having given previous notice in writing on or before the 1st December in the current year to the secretary of the Association, of his intention in that behalf, and having paid all arrears of subscription (if any) due by him.

Section 3. Membership. How Restored.—Any delinquent member having once failed to comply with the sections of this article, unless absent from the country, shall have his name erased from the register of members of the Canadian Medical Association, and shall not be restored to membership until all his dues have been paid, and satisfactory evidence produced

that he retains his membership in an affiliated society or association, if admitted through such channel.

Article II. Registration of Members.—No member shall take part in the proceedings of the Association, nor in the proceedings of any of the sections thereof until he has properly registered his name and paid his annual dues for that and previous years.

Article III. Guests and Visitors.—Sec. 1.—Medical practitioners residing outside of Canada and other men of science of good standing may be received by invitation of the Canadian Medical Association, the Executive Council, the president, or any one of the sections or at the discretion of any of these on a letter of introduction from an absent member of the Association. They may, after proper introduction, be allowed to participate in the discussions of a purely scientific nature.

Sec. 2.—Medical students may be admitted to either the general meetings or to the meetings of any of the sections thereof, but shall not be allowed to take part in any of the proceedings. They shall be vouched for as such students by some member of the Association to either the general secretary or treasurer.

Article IV. Honorary Members.—Honorary members shall be elected unanimously by the Executive Council.

EXECUTIVE COUNCIL.

Article I.—Qualifications for representatives on Executive Council.—Sec. 1.—No one shall serve as a member of the Executive Council who has not been a member of the Canadian Medical Association for at least two years.

Sec. 2.—Members of the Executive Council shall be elected for one year.

Sec. 3.—Every affiliated Medical Society or Association shall be entitled to elect one delegate to serve on the Executive Council for its membership from fifteen to fifty; two delegates for its membership from fifty-one to one hundred and fifty; three delegates for its membership from one hundred and fifty-one to three hundred; and thereafter one delegate for every hundred of a membership above three hundred; provided that no one delegate shall represent more than one affiliated society or association to which he may belong.

Sec. 4.—At the first general session of each and every annual meeting of the Canadian Medical Association, fifteen members thereof, who shall be present at that session, shall be elected by

ballot to act on the Executive Council for one year; provided that any one already elected a delegate by an affiliated society or association shall not be at that meeting elected a member of the Executive Council. The president of the Association shall name three tellers to conduct this ballot. The fifteen having the greatest number of votes shall be declared elected.

Sec. 5.—Every three years the Executive Council shall appoint a committee of five to examine the registers of membership of all affiliated societies or associations and so apportion the number of delegates entitled to be elected by each society.

Sec. 6.—Every delegate from an affiliated society or association shall be required before acting on the Executive Council, to have entered his name on the annual register of the Canadian Medical Association, paid his annual subscription to the Association and deposited a certificate with the general secretary of the Association, duly signed by the president and secretary of the affiliated society or association, from which he has been elected a delegate.

Article II. Order of Business.—Sec. 1.—The following shall be the order of business in the Executive Council, which can only be changed or departed from by a unanimous vote of that body:

- I. Calling the meeting to order by the president.
- II. Reading the minutes of the previous session.
- III. Reports of officers.
- IV. Reports of committees.
- V. Unfinished business.
- VI. New business.

Sec. 2.—The Rules of Order which govern the proceedings of the House of Commons of Canada shall be the guide for conducting the sessions of the Executive Council.

Sec. 3.—Ten members of the Executive Council shall constitute a quorum for the transaction of business.

Sec. 4.—It shall be the privilege of chairmen of committees and members of the Executive Council to report to the Executive Council, and they shall have the right to discuss their own reports.

Article III. Meetings of the Executive Council.—Sec. 1.—The meetings of the Executive Council shall be held on the dates of the annual meeting of the Canadian Medical Association, but not until after the first general meeting of the Association, and then not at the time of any general meeting of the Association.

Sec. 2.—As provided for in the constitution, the President of the Association shall be the President of the Executive Council and the General Secretary shall be the Secretary of the Executive Council.

Article IV. Nominations, Elections and Installation of Officers.—Sec. 1.—Nominations. Any five members of the Association may hand to the general secretary, in writing, the name of any member of the Association whom they may wish to nominate for any office, except in the case of the Finance Committee, which shall in all cases be elected by and from the members of the Executive Council, or any member of the Executive Council may nominate any member of the Association for any office.

Sec. 2.—All elections shall be by ballot and a majority of the votes cast shall be necessary to elect a candidate. Should there be more than two nominees for any position, the one having the lowest number of votes shall be dropped and a new ballot proceeded with. This procedure shall be continued until one of the nominees receives a majority of all votes cast, when he shall be declared elected.

Sec. 3.—The election of officers shall take place at any meeting of the Executive Council, and the exact time for same shall be fixed by the Executive Council.

Sec. 4.—The president shall appoint three tellers to conduct the ballot.

Sec. 5.—The Executive Council shall annually decide on the number of general addresses to be given at succeeding annual meeting and shall elect the readers to deliver same. In default thereof on the part of the Executive Council, this duty shall be discharged by the president.

Sec. 6.—Installation.—The president-elect shall be installed by the retiring president, at the first general session of the annual meeting of the Association succeeding the one at which he was elected.

OFFICERS AND COMMITTEES.

Article I. Duties of Officers.—Sec. 1.—President. The president shall preside at general meetings of the Association and at meetings of the Executive Council. He shall deliver the annual presidential address at either the first or second general session of the annual meeting, held under his presidency, as he may decide. In the absence of the president, the vice-president for the province in which the meeting is held shall perform the duties, or, in his absence, the meeting shall

select a vice-president. The president shall appoint annually a Committee of Arrangements, consisting of five members, who shall reside in the place at which the Association is to hold its annual meeting. He shall also name the chairman of this Committee.

Sec. 2.—The president shall be an *ex-officio* member of all committees.

Sec. 3.—In case of the death or resignation of the president the vice-president for the province in which the annual meeting is to be held, shall become the president.

Article II. Vice-Presidents.—The vice-presidents shall assist the president in the discharge of his duties at his request.

Article III. General Secretary.—Sec. 1.—The general secretary shall also be the secretary of the Executive Council of the Association. He shall give due notice of the time and place of all annual and special meetings, by publishing the same in the official journal of the Association, or if necessary in the opinion of the Finance Committee, by postal card to each member. He shall keep the minutes of the General Sessions of the annual meetings of the Association, and the minutes of each meeting of the Executive Council, in separate books, and shall provide minute books for the secretaries of the different sections which he shall see are properly attested by both chairmen and secretaries thereof. He shall notify members of committees of their duties in connection therewith. Where necessary or deemed advisable by the president, he shall conduct correspondence with other organized medical associations or societies, domestic or foreign. He shall preserve the archives, the published transactions, essays, books, journals, papers and addresses of the Association. He shall see that the official programme of each annual meeting is properly published and shall perform such other duties as may be required of him by the president or Finance Committee.

Sec. 2.—The general secretary shall be *ex-officio* a member of all committees.

Sec. 3.—For his services the general secretary shall receive a salary which shall be fixed by the Finance Committee.

Sec. 4.—The general secretary may also be elected to the office of treasurer.

Sec. 5.—All his legitimate travelling expenses to and from the annual meeting and other places ordered by the Finance Committee shall be paid for him out of the funds of the Association.

Article IV. Local Secretaries.—The local secretaries shall assist the general secretary at the annual and special meetings and shall perform the duties of corresponding secretaries for the respective provinces they are elected to represent; these duties shall be performed under the direction of the general secretary.

Article V. Treasurer.—Sec. 1.—The treasurer shall receive and collect the annual fees and demands of the Association from the members. He shall be the custodian of all moneys, securities and deeds belonging to the Association, and shall only pay out moneys on an order drawn by the general secretary and approved by the Finance Committee, whose chairman shall also sign all such orders.

Sec. 2.—The treasurer shall give to the Finance Committee a suitable bond for the faithful discharge of his duties, and shall receive for his services a salary to be fixed by the Finance Committee.

Sec. 3.—The treasurer may also be elected to the position of general secretary.

Sec. 4.—When the offices of general secretary and treasurer are filled by one and the same person, it shall be the duty of the Finance Committee to appoint a collector of dues and subscriptions at each annual meeting, who shall be responsible to the Finance Committee.

Article VI.—All the officers shall discharge the duties of their respective positions until the completion of the business and scientific proceedings of each meeting.

FINANCE COMMITTEES.

Article I. Appointment and Duties of the Finance Committee.—Sec. 1.—The Finance Committee as set forth in the constitution, shall consist of five members annually appointed or elected from the members of the Executive Council. This Finance Committee shall have charge of all the properties of the Association, and of all the financial affairs of the Association. It shall elect its own chairman. The chairman may then appoint any sub-committees that may be necessary or desirable in connection with the finances of the Association. This Committee shall have charge of the publication of the official journal of the Association, and of all published proceedings, transactions, memoirs, addresses, essays, papers, programmes, etc. of the Association. It shall have power to omit, in part or in whole, any paper or address that may be referred to it, for publication in the official journal of the Association, by the general

meeting, the Executive Council or any of the sections. It shall appoint an editor and a managing editor of the official journal, who may be one and the same person if by them deemed advisable, and shall define the respective duties and responsibilities of each. They shall also appoint such assistants as may be deemed necessary for the proper conduct of this official journal, and shall determine their salaries and the terms and conditions of their employment. The Finance Committee shall have the accounts of the treasurer audited annually or oftener if desirable, and shall make an annual report on the same to the Executive Council. The Finance Committee may meet when and where they may determine, and the chairman shall call a meeting on the request of three members in writing, and three members of the Finance Committee shall constitute a quorum for the transaction of the business of the Finance Committee.

Sec. 2.—The president and general secretary shall be *ex-officio* members of the Finance Committee and the general secretary shall act as the secretary of the Finance Committee.

Sec. 3.—Any donations recommended by the Executive Council shall be paid only with the approval of the Finance Committee.

COMMITTEES.

Article I. Classification of Committees.—Sec. 1.—There shall be (a) Standing; (b) Special and (c) Reference Committees.

Sec. 2.—Standing Committees. The Standing Committees shall be the following: A Finance Committee, a Committee of Arrangements.

Sec. 3.—The Finance Committee shall be appointed by the Executive Council and its members shall always be appointed or elected from amongst the members of the Executive Council.

Sec. 4.—The Committee of Arrangements shall be appointed by the president. They shall be residents in the place in which the annual meeting is to be held, and the chairman thereof shall be named by the president.

Sec. 5.—The Committee of Arrangements shall be required to undertake to provide for transportation; a hall or halls for meeting purposes; a hall for Executive Council meetings; halls for section work; rooms for committees; rooms for general secretary, and other secretaries; room for registration; room or rooms or halls for exhibition purposes.

Sec. 6.—The general secretary shall act in an advisory capacity to the Committee of Arrangements.

Sec. 7.—The Committee of Arrangements shall have power to add to its numbers and shall name all the Reference Committees as well as the chairmen thereof.

Article II. Special Committees.—Special Committees may from time to time be appointed by the Executive Council; they may be named by the president on the authority of the Executive Council. They shall perform the duties for which they were called into existence and shall in all cases report direct to the Executive Council as hereinbefore provided.

Article III. Reference Committees.—Sec. 1.—The Executive Council shall at its first meeting appoint all the Reference Committees and name the chairmen thereof. Their titles shall be as follows: (1) A Committee on Sections and Section Work; (2) A Committee on Medical Legislation; (3) A Committee on Medical Education; (4) A Committee on Hygiene and Public Health; (5) A Committee on Amendments to the Constitution and By-laws; (6) A Committee on Reports of Officers; (7) A Committee on Credentials; (8) A Committee on Necrology.

Sec. 2.—The general secretary shall notify each member of these committees so appointed of his duties.

Sec. 3.—Committee on Sections and Section Work. The Committee on Sections and Section Work shall secure papers for the sections. It shall report to the president or to the Executive Council when required.

Sec. 4.—Committee on Legislation. To the Committee on Legislation shall be referred all matters pertaining to local and federal Medical Acts. It shall report to the president or the Executive Council when required.

Sec. 5.—Committee on Medical Education. To the Committee on Medical Education shall be referred all matters pertaining to medical colleges and medical education. It shall report to the president and Executive Council when required.

Sec. 6.—Committee on Hygiene and Public Health. To the Committee on Hygiene and Public Health shall be referred all matters relating to hygiene, public health, etc. It shall report to the president or to the Executive Council when required.

Sec. 7.—Committee on Amendments to the Constitution and By-laws. To the Committee on Amendments to the Constitution and By-laws shall be referred all matters relating to the subject, before action thereon by the Executive Council. It shall report to the Executive Council when required.

Sec. 8.—Committee on Reports of Officers. To the Com-

mittee on Reports of Officers shall be referred the president's address, the report of the general secretary and the report of the Finance Committee before submission to the Executive Council.

Sec. 9.—Committee on Credentials. To the Committee on Credentials shall be referred all questions regarding the registration and credentials of delegates, before submission to the Executive Council.

Sec. 10.—Committee on Necrology. To the Committee on Necrology shall be assigned the duty of collecting, as far as possible, the obituaries of members dying since the last annual meeting. These shall be duly filed by the general secretary. The committee shall report on the call of the president at the last general session of each annual meeting.

Sec. 11.—Three members shall constitute a quorum of any Reference Committee, and all reports shall be made as hereinbefore provided.

SCIENTIFIC WORK.

Article I. General Meetings.—Sec. 1.—Date of meetings. The date of each annual meeting shall be fixed by the president on the advice of the Committee of Arrangements.

Sec. 2.—Time of meetings. The general meetings or sessions shall be held at 10.30 a.m. and 7.30 p.m. of the first day of any annual session and at 7.30 p.m. on the subsequent days. The president shall preside at all general meetings, and in his absence, or at his request, one of the vice-presidents.

Sec. 3.—The president shall deliver his annual address at one of the general meetings of the first day, as he may determine. The time of the deliverance of all other general addresses shall be arranged for by the Committee of Arrangements.

Sec. 4.—The order of business of the first general session of each annual meeting shall be as follows:

1. Calling the meeting to order by the president.
2. Prayer; by some one designated by the president.
3. Addresses of welcome and response.
4. The report of the Committee of Arrangements.
5. Reading the minutes of the last general session.
6. The report of the general secretary of the last annual meeting.
7. Election of the Association's members to the Executive Council.
8. Presidential or other addresses, if decided on by the president and Committee of Arrangements.

Sec. 5.—The order of business for all subsequent general sessions shall be the same as that for the Executive Council.

Sec. 6.—All addresses delivered at any annual meeting shall immediately become the property of the Association, to be published or not, in whole or in part, as deemed advisable, in the official journal of the Association. They must, as soon as they have been delivered, be handed to the general secretary, who shall refer them to the Finance Committee. Any other arrangement for their publication must have the consent of the author or of the reader of same and of the Finance Committee.

Article II. Sections and Section Work.—The sections to be held at any annual meeting shall be determined by the Executive Council. In default of their so determining the duty shall be discharged by the Committee of Arrangements, who shall also appoint or elect the chairman thereof and the vice-chairman and secretaries. These section officers shall serve for such meetings only, but any of them, if deemed advisable by the Committee of Arrangements, may be appointed for the following meeting in proper course.

Sec. 2.—Duties of the officers of sections. The chairman shall preside at each meeting of any section, or in his absence or at his request, the vice-chairman shall preside. The secretary of each section shall keep a correct account of the transactions, and shall record them in a special section minute book provided by the general secretary. The chairman and secretary of each section must verify and sign the minutes.

Sec. 3.—Each section shall hold its first annual meeting at 2 p.m. on the first day of each annual meeting; and each subsequent day of the annual meeting at 9 a.m. and 2 p.m. until the programme of that section is completed. No section shall hold a meeting that will in any way conflict with a general meeting of this Association.

Sec. 4.—Honorary members of this Association shall have the privilege of presenting papers before any section and taking part in any of the scientific discussions.

Sec. 5.—All papers, essays, photographs, diagrams, etc., presented in any section, shall become the property of the Association, to be published in the official journal of the Association or not as determined by the Finance Committee, and they shall not be otherwise published except with the consent of the author and of the Finance Committee.

Sec. 6.—Each author of a paper read before any section shall, as soon as it has been read, hand it with any accompan-

ing diagrams, photographs, etc., to the secretary of the section before which it has been presented, who shall endorse thereon the fact that it has been read in that section, and shall then hand it to the general secretary to lay before the Finance Committee for publication, in whole or in part, or otherwise disposed of as may be deemed advisable by that Committee.

Sec. 7.—The order of procedure in any section shall be:

1. Calling the section to order.
2. Remarks by the chairman.
3. Reading minutes of previous meeting.
4. Reading of papers and discussions thereon.
5. Nomination of honorary members of the Association.

Sec. 8.—No paper shall be "Read by Title," except by unanimous vote of the section before which it was to have been read.

Sec. 9.—No business of any description shall be introduced at any meeting of any section except as hereinbefore provided.

AMENDMENTS.

Article I.—The Executive Council at any annual meeting may instruct the Finance Committee to make or to have made any changes in the articles of incorporation which may appear desirable, or which may be made necessary by any change or amendment in the constitution and by-laws of the Canadian Medical Association.

Article II. Amendments to By-laws.—No amendment to by-laws shall be made except on a three-fourths vote of the Executive Council; provided that no amendment shall be acted on until the day of meeting following that on which the amendment was introduced.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend. The annual fee is only \$2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

EXECUTIVE.

President—R. W. POWELL, M.D., Ottawa.

Vice-President—J. O. CAMARIND, M.D., Sherbrooke.

Secretary-Treasurer—J. A. GRANT, Jr., M.D., Ottawa.

SOLICITOR

F. H. CHRYSLER, K.C., Ottawa.

Send fees to the Secretary-Treasurer by Express Order, Money Order, Postal Note or Registered letter. If cheques are sent please add commission.

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Dominion Medical Monthly

And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVII.

TORONTO, NOVEMBER, 1906.

No. 5.

COMMENT FROM MONTH TO MONTH.

In order to inform our readers in the matter of reciprocity between the General Medical Council of England and the medical councils of the various Provinces of Canada, a short report of the meeting of the College of Physicians and Surgeons of the Province of Quebec, held on September 26th, will prove interesting. But, before taking that up, a draft of the British Medical Act (1886) Amendment Bill, promoted by General Laurie, and having the support of Sir Walter Foster, Sir John Tuke, Mr. Rothschild, Sir Howard Vincent, Mr. Middlemore, and Sir Mancherjee Bhownagree, will come in quite appropriately. The memorandum of this amendment was as follows: In order to facilitate the admission of the colonially trained and registered medical men to practice in Great Britain and hold appointments in the Imperial Service, the Act of 1886 provided for reciprocity between the mother country and

such of the self-governing colonies as might comply with certain conditions, but that Act expressly stipulated that when any colony had a provincial and a federal organization such reciprocal arrangements should be entered into with the federal government and not the provincial. In the case of Canada, the British North America Act of 1867, enacted by the Imperial Parliament, expressly provides that education shall be entirely under control of the provincial and not the federal government, so that it is impossible to bring the Act of 1886 into force in Canada. It is impracticable to amend the British North America Act of 1867, and to transfer the control of education to the federal authorities, and, therefore, it is the object of this bill to amend the Medical Act of 1886, without in any way interfering with the principle, and to enable reciprocal arrangements to be entered into either with the federal or provincial governments.

Subsequent to the memorandum, there follows: A Bill to Amend the Medical Act, 1886, A.D. 1904. Be it enacted by the King's Most Gracious Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same as follows: For the purpose of the Medical Act, 1886, where any part of a British possession is under a central and also under a local legislature, His Majesty may, if he thinks fit, by order-in-council, declare that the part which is under the local legislature shall be deemed a separate British possession. This act may be cited as the Medical Act (1886), Amendment Act, 1904. Up to the meeting of the Quebec College of Physicians and Surgeons, Nova Scotia was the single province which had moved in the direction of and established reciprocity with the home country. Quebec now follows suit at its September meeting, although at the previous meeting in July slight discussion of the matter had taken place. It has been brought about thus in the Province of Quebec: Dr. Donald Macalister, president of the General Medical Council of Great Britain, addressed a letter some months ago to a practitioner in the Province, not a member of the Medical Council, and, as it lets in a

great deal of light on the subject, it is here reproduced as it appeared in the October number of the *Montreal Medical Journal*: "I agree with you entirely that reciprocity with Great Britain and inter-provincial reciprocity are entirely separate questions and should be dealt with separately. The former under the new law can be dealt with at once, without waiting for any reconstruction of the Medical Administration of Quebec. The one thing essential for a successful application to the King in council, is, that Quebec is prepared to allow duly qualified British practitioners to register and practise in Quebec without further examination. In other words, that possession of a registered British diploma shall admit to the Quebec register in the same way as if the holder had a degree from McGill or Laval. If this assurance is conveyed to the Privy Council by the "Provincial Government," along with their application to have the British Medical Act, Part II., 1886, applied to the Province, I am prepared to advise the Privy Council that the application should be granted. There is no need to wait for a Central Examining Board; there is none such in the Australian States, or Italy, or India, which already enjoy reciprocity. Supposing the Privy Council grant the application, the next step lies with the General Medical Council. It has to decide what Quebec diplomas shall admit to the British register. In accordance with precedent it will probably decide that any medical degrees granted in the Province which are registered in the Provincial register shall be registrable here. In no case hitherto, where a country or province (e.g., New South Wales or India) has been admitted to reciprocity has the Council discriminate between the several local universities, and accepted some while it refused others. But it is, of course, just possible that the Council might refuse to recognize a four-years' course—though if that is the rule throughout the Province, and there is no higher standard available, the result would be to render the reciprocity granted by the King in Council a nullity. Such a result would not, I think, be contemplated for a moment by the Council; and, if it were, the Privy Council has power to prevent such a fiasco, and could, without more ado, order the Medical Council to register Quebec degrees.

In my opinion this is the course that would be taken, and justifiably so; and the knowledge of its possibility and probability which the Medical Council possesses should remove any hesitation on your part as to whether the Council would act reasonably or not. It appears to me that the fact that the Quebec College of Physicians is primarily a registering and supervising body, and not an examining body, makes the procedure simpler and easier because it is on the lines of all existing precedents. For this reason I should much prefer that Quebec should be the first Province to apply. The examining-board provinces would raise other questions of a novel kind for which our past experience would be less useful."

The College of Physicians and Surgeons of Quebec, at its 26th of September meeting, adopted the following resolution: That the College of Physicians and Surgeons of the Province of Quebec beg the Legislature of the Province of Quebec at its coming meeting to send a request to His Majesty's Privy Council demanding the application of the Medical Act of 1886 and the Amendments of 1905 to the Province of Quebec. The following resolution was also adopted with the subjoined proviso: That upon a favourable answer from the Privy Council, the College of Physicians and Surgeons of the Province of Quebec enter upon the necessary negotiations with the General Medical Council of Great Britain, in order to assure the establishment of reciprocity between Great Britain and the Province of Quebec: Provided that those who, having obtained the British license and are demanding the license of the College of the Province of Quebec, shall prior to their British registration have fulfilled all the requirements of our Medical Act in regard to the obtaining of our license. The design of this proviso is to prevent irregulars in the Province of Quebec going to Great Britain and coming back with British registration and so demanding and even compelling their registration in the Province of Quebec.

There is a significant red insert in the Calendar of the Medical Faculty of McGill University for the session, 1906-1907. It reads as follows: "It is proposed by the University to establish a five-years' course for the degree of Doctor of Medicine and Master of Surgery, beginning in the autumn of 1907. Full details will appear in the Calendar of 1907-1908." At the recent meeting of the College of Physicians and Surgeons of Quebec above mentioned, there was adopted a resolution providing for the amending of the by-laws so that a five-years' course could be exacted of all candidates for the provincial registration. The Quebec Legislature at its coming session will be asked to ratify this by-law.

Science Notes.

Something About Cereal Breakfast Foods.

There is no part of the world except the Arctic regions where cereals are not extensively cultivated. From the oats and rye of the North to the rice of the hot countries, grains of some kind are staple foods.

An idea of the importance of cereal foods in the diet may be gathered from the following data, gathered by Dr. Charles D. Woods and Prof. Harry Snyder for the Department of Agriculture, based upon the results obtained in dietary studies with a large number of American families. Vegetable foods, including flour, bread, and other cereal products, furnished 55 per cent. of the total food, 39 per cent. of the protein, 8 per cent. of the fat, and 95 per cent. of the carbohydrates of the diet. The amounts which cereal foods alone supplied were 22 per cent. of the total food, 31 per cent. of the protein, 7 per cent. of the fat, and 55 per cent. of the total carbohydrates—that is, about three-quarters of the vegetable protein, one-half of the carbohydrates, and seven-eighths of the vegetable fat were supplied by the cereals. Oats, rice, and wheat breakfast foods together furnished about 2 per cent. of the total food and protein, 1 per cent. of the total fat, and 4 per cent. of the carbohydrates of the ordinary mixed diet, as shown by the statistics cited. These percentage values are not high in themselves, but it must be remembered that they represent large quantities when we consider the food consumed by a family in a year.

The reasons for such an extensive use of cereal foods are not hard to find. Besides being cheaply and easily grown, the grains contain unusually good proportions of the necessary food ingredients with a very small proportion of refuse. They are also readily prepared for the table and are palatable and digestible. Owing to their dryness they are compact and easily preserved without deterioration.

The grain as it grows on the stalk is surrounded by a hull or husk, which is so indigestible that it is removed before the seed is used for food. Each grain has an outer skin or bran layer, which may or may not be removed in milling. It is nearly always taken

off from rice and buckwheat, sometimes from wheat, corn, and rye, and almost never from the other grains unless the outer sections are ground off as in pearled barley. Grains simply hulled or husked and slightly crushed are called groats or grits; more finely crushed they are termed meal, and when ground into a fine powder and sifted they are known as flour.

Grains in the raw state are not usually considered pleasant to the taste and are thought to be difficult of digestion, and, therefore, cereals are almost always cooked before eating. The simplest and doubtless the oldest way of cooking them was by parching. This was frequently all that was done to the oats which the Scotch Highlanders took as their only provisions in their border forays, or to the corn the American Indians used for a similar purpose. But other ways of cooking make the grain more palatable, and it is usually mixed with water or other liquid and either baked as bread and cakes or boiled or steamed as pudding or porridge. It is the use of cereals as porridge that is of special interest, as cereal breakfast foods are most commonly used in America for porridge making or as a substitute for porridge. When used in this form they are perhaps not as convenient to eat as bread, do not keep so well, and require long cooking, but in spite of these disadvantages porridge is much used the world over, and grains have been thus cooked since earliest times. Many varieties of porridge are found. Sometimes the cereals are simply boiled in water, sometimes with milk, or with meat or kale, as in Scotch brose. Welsh budrum is made from oats which have been allowed to ferment and are then cooked, and the Arabs have a similar dish, kouskous, made from fermented wheat. In the old-fashioned bag puddings of England, of which Christmas plum puddings are the direct descendants, suet and fruit were mixed with wheat or barley and all steamed together in a bag. The simpler kinds of porridge are, however, the most common, and it is from them that modern cereal breakfast foods have been developed.

The number and variety of cereal breakfast foods at present on the market are large, but the majority of them fall readily into one of three groups. The first includes those which are prepared by simply grinding the grain, the second those which have been steamed or otherwise partially cooked and then ground or rolled, and the third those preparations which have been acted upon by malt, which induces a greater or less chemical change in the starch present.

No class of foods is more extensively or ingeniously advertised than the cereal breakfast foods. The claims sometimes made for them are astonishing. Some of them are said to contain several times as much nourishment as the same weight of beef; others are lauded as especially valuable as brain food or nerve tonics, and very many are claimed to be particularly well suited for persons of weak digestion. Many of these claims are obviously preposterous, others are doubtless true, and still others contain an ingenious mixture of fact and fancy. Realizing that accurate information in regard to breakfast foods was needed, investigators at several agricultural experiment stations have recently studied their composition and food value, and it is now possible to make a number of definite and reliable statements about them.—*Scientific American*.

The Need and the Testing of Pure Drugs.

It is, perhaps, not commonly realized that the druggist, by reason of necessity, occupies a position of trust toward the entire community. The helpless, the sick, the physically weak, yea, even the dying, rely upon him absolutely for safety, accuracy, and skill in the preparation of the physician's order. It would be idle to deny that cases have been known in which pharmacists betrayed their trust, but such, happily, were few in number, and pertained mostly to the atrocious crime of drug-substitution. This offence is as contemptible, deliberate, and cowardly as a stab in the dark, for in most cases it constitutes a criminal act difficult to prove and against which the victim has no redress whatsoever. Even the atmosphere of the sickroom has been contaminated with the spirit of commercialism and individual greed that seems to have so thoroughly infected our so-called modern civilization. While the integrity of the average pharmacist is all that could be desired, yet he is liable to dispense prescriptions that are not what they purport to be, in consequence of the use of drugs that are either partly or wholly inert. Most druggists have neither the time nor the facilities for making a careful investigation of the physiological action of the many drugs that compose their stock. But that work of late is being done for them, on a large scale, and will eventually revolutionize the drug trade.

Years ago, many manufacturers merely complied with the direc-

tions of the United States Pharmacopœia, providing for the selection of the drug by more or less superficial means and its exhaustion by a given menstruum (solvent) to the production of a stated yield. But a leading firm of manufacturing chemists went a step further and attempted to gain some insight into the value of the more powerful drugs by estimating their content of active constituents. This work was attended with much expense and also great difficulty because of the lack of satisfactory methods of procedure. Nevertheless they persevered, and as a result were soon able to arrive at comparative results, which showed to their astonishment that different lots of such drugs as quinine, belladonna, hyoscyamus, nuxvomica, and others varied widely in the proportion of the active constituents they contained; that in fact it was the exception rather than the rule to find successive lots of any given drug to be possessed of uniform activity.

The extent to which a drug is contaminated depends, of course, largely upon its commercial value and the ease with which it may be simulated. Drugs like opium and crocus, for instance, are frequently adulterated and fraud is also widely practised in connection with the "manufacture" of powdered chemicals, resinoid or inspissated substances. Although time has wrought an improvement in that respect since cascara sagrada was first introduced to the medical world, that drug is still the object of shameless substitution. Questionable preparations of it are at fault, either because the bark employed in making them is not genuine or has not been properly cured and extracted. Bark less than two years old contains an active ferment that gives rise to unpleasant after-effects and must, therefore, be considered impure. Other plants are often mixed with strophanthus; there are about thirty varieties of this plant, of which only six contain strophantin, the active principle.

The senna of commerce is frequently adulterated and unsophisticated buyers are sometimes supplied with Tinnevely senna in place of it, although the latter contains only two-thirds as much of the active principle, i.e., the principle upon which the therapeutic effect of the drug depends. The sennas of Tripoli and Mecca are also of an inferior character. Much of the Chinese rhubarb that is marketed is unfit for use because it is decayed or worm-eaten. Sometimes the cheaper European sorts are powdered, colored yellow with turmeric, and passed off as the genuine article from the flowery kingdom. Asafoetida is contaminated with gum resin of an inferior

quality or mixed with foreign substances, such as red clay, barley flour, etc.; in some instances the impurities have been known to reach 30 per cent. Belladonna and white bryonia are sophisticated with the root of a plant designated botanically as *Medicago sativa* and genuine calumba root with what is known as false calumba. Artificial substances are often employed to adulterate Japan camphor.

The quality of coca and that of the cinchona bark of commerce varies greatly, which accounts for the fact that the therapeutic effect of some of these drugs is so slight that they may almost be regarded as worthless. Dill and anise are used as the adulterants of conium. False jalaps are not uncommon in the market and sophisticated manna has been described by several authorities. The scammony of Smyrna is frequently displaced by a substitute manufactured in the south of France and the large or false senega of the trade palmed off for the much higher priced true senega. Much of the musk upon the market must be regarded with suspicion, as the high price of the odoriferous articles invites imitation. The leaves of *Uva ursi* are often intermixed with the inert leaves of other umbelliferous plants.

The foregoing constitutes a powerful argument why physicians and druggists should avoid questionable medicinal products and give preference to medicaments that are entirely reliable, even though they may be a trifle higher in price. Only the larger laboratories in the country possess the necessary facilities and capital to manufacture a full line of first-class pharmaceuticals. They are imbued with a sense of responsibility and are aware of the fact that their reputation depends upon the nature of the goods they market. Abundant means enable them to engage experts, who exercise great care in the selection of crude drugs and reject all materials that do not come up to the standard. Moreover, the gathering of the drug plants is under the direct supervision of men who are thoroughly posted in regard to the pharmacological features of the plant they are looking for. Before the remedy is placed upon the market, it is standardized, that is to say, subjected to tests that determine its therapeutic value and insure uniformity. Having decided upon a standard, the drug is extracted by the proper menstruum, in the most approved manner, assayed chemically, and "standardized" by concentration or dilution as required.

But there are certain powerful drugs, such as the heart tonics,

digitalis, strophanthus, and convallaria; the powerful arterial sedative aconite, ergot, cannabis indica, squill, and others equally important that cannot be assayed by chemical processes.

Happily, the method of physiological assay is now available, and practical use is made of the fact that certain of these drugs will produce characteristic physiological effects upon certain animals. For instance, good ergot blackens the comb of the cock, while an inferior specimen fails of effect. The therapeutic value of the heart tonics is measured by means of delicate apparatus which accurately determines the effect of graduated doses upon the cardiac mechanism of frogs. These amphibians are also employed to determine the maximum and minimum dosage of standard preparations of strophanthus.

The medical man is groping in the dark when he prescribes a preparation of unknown strength, the first dose of which may prove ineffective, or possibly poisonous. Under such circumstances he is virtually compelled to make a physiological test upon his patient. Gradually the dose must be increased or diminished until he finds that a definite amount produces the effect desired. But should the prescription be refilled with a preparation from another manufacturer, or by another apothecary, the correct dose must again be determined experimentally as before. When drugs are standardized by chemical assay or physiological test, however, the physician escapes the humiliation of palpable impotence in the face of danger and there is no occasion for needless experiment at the bedside, where so frequently prompt drug action saves lives.—HUGO ERISCHEN, in *Scientific American*.

IN light narcosis the pupils may dilate reflexly from operative manipulations. This, of course, is not to be confused with the sudden extreme dilatation that occurs when the narcosis has been carried too far.—*American Journal of Surgery*.

AFTER all, the localization of bone tenderness is not only the most useful sign in determining the site of a fracture, but, even in the absence of other signs, it is often, in itself, diagnostic of the presence of a fracture. As instances, may be cited greenstick fracture of the clavicle, and fracture of the metacarpal and metatarsal bones.—*American Journal of Surgery*.

Physician's Library.

WE have received the second Volume Report of the Wellcome Research Laboratories, of Gordon Memorial College, Khartoum, Soudan. It is double the size of the first Report, and contains reports and observations of striking value. Fine illustrations add to its importance.

International Clinics, Vol. III. Sixteenth Series.

This volume contains many beautiful illustrations and 298 pages of very valuable text. The present volume deals with Treatment, Medicine, Surgery, Obstetrics and Gynecology, Rhinology, Otology and Pathology. There is one colored plate, eighteen plates and eight figures, all splendidly keeping up the high standard this excellent production has attained.

Diseases of the Prostate Gland and Adnexa, A non-surgical treatise on the: By GEORGE WHITFIELD OVERALL, A.B., M.D., Chicago. Rowe Publishing Co., Chicago.

In inspecting this interesting little work, our attention is called to three new and original treatments of troubles of the prostate gland: 1. An instrument especially commended in diagnosis and treatment, simple and inexpensive; 2. an instrument which is especially desired for mechanical vibrating massage apparatus; 3. a thorough delineation of the author's method of applying the electro-cautery.

SEVERE localized pain after traumatism, especially in children, may be due to subperiosteal fracture, e.g., near the head of the humerus or the femur. Extreme localized tenderness is the chief sign; abnormal mobility and deformity are absent, and crepitus may not be elicited.—*American Journal of Surgery*.

News Items.

VIRDEN, Man., has a new hospital.

SELKIRK, Man., is to have a new hospital.

THE Leper Station in British Columbia is to be improved.

TYPHOID fever is prevalent in several different centres in Ontario.

ST. MICHAEL'S HOSPITAL, Toronto, is being enlarged to have 300 beds.

THE UNDERGRADUATES' SOCIETY and the McGill Medical Society will amalgamate.

DR. DANIEL CLARK, Toronto, has been elected an honorary member of the American Psychological Society.

DR. FRANK P. COWAN, Toronto, died recently in this city, aged 40 years. He was a graduate of Trinity, 1889.

DR. MILVIN is the new president of the St. John, N.B., Medical Society.

DR. ALEX. CAMPBELL, Superintendent of the Winnipeg General Hospital, has recovered from an attack of appendicitis.

QUEEN'S UNIVERSITY is said to be after \$25,000 from the Ontario Government for its medical department.

ONTARIO is deporting all insane who have only been in the province two years.

MR. G. F. CLIFF, Carleton Place, Ont., who formerly represented the DOMINION MEDICAL MONTHLY in the Great West, has received his M.D.C.M. at Queen's University.

THE Canadian Northern Railway proposes to establish hospitals at Port Arthur, Rainy River and Winnipeg.

DR. F. G. FINLEY, Montreal, is spoken of as successor to the late Dr. James Stewart as professor of medicine at McGill.

DR. C. B. COUGHLIN, Peterboro', Ont., has been appointed superintendent of the Deaf and Dumb Institute at Belleville, Ont.

CONTRACTS for additions to cost \$27,000 have been let in connection with the consumption institution at Weston, near Toronto.

THE Department of Agriculture, Saskatchewan, is taking vigorous steps to control typhoid fever and tuberculosis in that province.

DR. F. J. SHEPHERD, Montreal, received the honorary degree of Doctor of Laws at the dedication ceremonies of Harvard University.

DR. WM. A. BALL, Toronto, died suddenly on the 3rd of November, aged 38 years. He was a graduate of Toronto and Trinity, 1904.

GRACE, St. Michael's and the Western hospitals, Toronto, want \$50,000 each from the Toronto City Council. All hope they will be successful in getting it.

THE 25th graduating exercises at the Training School of the Toronto General Hospital has just been held. In all 441 nurses have received diplomas from this institution.

FROM the opening of the Alexandra (contagious diseases) Hospital, Montreal, on the 9th of July, to the 30th of September, there were: Diphtheria 37, deaths 3; scarlet fever 20, no deaths; measles 8, no deaths; erysipelas 1, and 1 death.

WINNIPEG MEDICAL SOCIETY has elected the following officers: President, Dr. E. W. Montgomery; 1st vice-president, Dr. J. R. Davidson; 2nd vice-president, Dr. N. J. McLean; secretary-treasurer, Dr. C. H. Vrooman; councillors, Drs. McKenty, H. MacKay, Galloway, and Todd.

DR. FOWLER and wife, of Wingham, Ont., have gone to California for the winter, and may remain there.

DR. J. W. S. McCULLOUGH, of Alliston, has been appointed Chairman of the new Board of Health of Ontario.

DR. W. SLOAN, who has been out in the Klondike for nine years returned last week to his home in Blyth, Ont.

DR. J. L. TURNBULL, formerly of Goderich, is now taking up special work in New York hospital, before locating.

DR. R. E. McKECHNIE, Vancouver, and Dr. R. Eden Walker, New Westminster, have arrived home after two months east.

DR. A. D. MCINTYRE, Petrolia, has arrived to assume his duties as general superintendent of the hospital at Kingston, Ont.

DR. H J. BROWNING, of Exeter, Ont., has left on a trip through the North-west, and if he finds a suitable place he may locate in one of the western towns.

DR. J. L. ROBINSON is spending a few days at his old home in St. Marys prior to his leaving for Vancouver, where he has been appointed medical superintendent of the new Vancouver General Hospital. Graduating from McGill in 1904, Dr. Robinson entered the Montreal General Hospital, where hespent two years as Senior Resident Surgeon, subsequently he was appointed Assistant Superintendent of Montreal's new Contagious Hospital, which position he recently resigned to accept the superintendency in Vancouver.

Obituaries.

JAMES STEWART, M.D.

Dr. James Stewart, Professor of Medicine and of Clinical Medicine in the Medical Department of McGill University, Montreal, died in that city on the evening of the 6th of October. The cause of death was cerebral hemorrhage. The late Dr. Stewart was born in Ontario in 1847. He was educated at the Ottawa Grammar School and McGill University, from which latter institution he was graduated in 1869 as M.D., C.M. He immediately pursued his medical studies further at Berlin, Edinburgh and Vienna, and obtained the degrees at Edinburgh of L.R.C.P. and L.R.C.S. Returning to Canada, he entered for a few years upon practice in Ontario, but soon removed to Montreal, where from 1883 to 1891 he was professor of materia medica and therapeutics in the University of McGill. Since 1891 he has held the chair of medicine and of clinical medicine. On the opening of the Royal Victoria Hospital he was appointed physician-in-chief, which position he held up to the time of his death.

Publishers' Department

COUGHS AND THEIR TREATMENT.

BY ALLEN DESOER, M.D., AND C. W. COMPTON, M.D., OF WAWSIDE
MISSION HOSPITAL, SEATTLE, WASH.

An intractable cough!

What condition so persistently tries the patience of every physician?

Careful examination has been made, the diet regulated, and one of the innumerable prescriptions for that ailment selected, but still the cough continues.

Then more investigation, and more careful prescribing; but still after weeks that familiar cough re-echoes through your waiting room, and you wish Mrs. Smith would change her doctor.

No such good fortune attends you, and that cough haunts you as dismal thoughts of phthisis do your patient, until you are almost determined to advise a change of climate.

It is not the object of this paper to go into details regarding the only too well-known disadvantages of most of our familiar cough mixtures. Down to that household standby, "cod liver oil in every form," they have proven, in the vast majority of instances, discouraging failures.

The above-mentioned remedy, which the patient considers proof positive of the doctor having made a diagnosis of consumption, may invariably be depended upon to disarrange the digestion at least.

Cod liver oil, once begun, must frequently be continued throughout the entire winter season.

Nor can it be shown that the ingestion of fats and oils into the system, to become oxidized when coming into contact with the oxygen in the lungs, ever does more than raise the local temperature of combustion.

Although this may prevent cold in comparatively healthy lung

tissue, its therapeutic (?) effect on the inflamed pulmonary structure may be described as positively harmful.

Cough is a symptom, varying in tensity and character according to its cause.

Nor is that cause always situated within the respiratory organs themselves.

Cough is essentially a reflex act depending upon an irritation of the respiratory centre.

These sources of irritation may be sub-divided as follows:

Dropping of mucous from the posterior nares in chronic catarrh.

Polypo, enlarged uvula or tonsils, defective closure of the glottis, irritations within the larynx from whatsoever cause, malignant or otherwise.

Bronchitis, pneumonia and pleurisy.

Gastric when due to derangements of the stomach.

Cardiac disease, irritations of auditory canal, and organic diseases within the abdominal cavity.

From the foregoing causes it may be readily estimated that to arrive at the exact nature of any given case may not always be an easy matter. Nevertheless, we must relieve the patient without risk of disturbing either digestive or circulatory systems. Any remedy which will attain this object in a goodly number of cases is indeed a godsend to patient and physician, and in every sense an ideal remedy.

Not until our attention was called to Glyco-Heroin (Smith) did we become acquainted with a remedy which we have used with a most unvarying success in coughs of every description, and in patients of all ages and conditions, without the slightest unfavorable effect.

The points which recommend Glyco-Heroin (Smith) are:

1. Palatability.
2. Economy (three to four ounces being ample for a cure of the average case).
3. Its immediate action, soothing the most trying cases.
4. Its absolute freedom from unpleasant or unfavorable effects.
5. It is not only a palliative but a curative agent.
6. The hyoscyamus it contains reaches those trying cases of dry cough due to other causes than simple catarrhal irritation of the respiratory tract.

We are convinced that Glyco-Heroin (Smith) has no competi-

Dominion Medical Monthly

And Ontario Medical Journal

VOL. XXVII. TORONTO, DECEMBER, 1906.

No. 6.

Original Articles.

THE EVOLUTION OF MEDICINE IN ONTARIO.*

BY H. B. ANDERSON, M.D., L.R.C.P. (LOND.), M.R.C.S. (ENG.)

Associate Professor of Clinical Medicine, University of Toronto.

In assuming the duties of President of the Toronto Clinical Society for the coming year, I wish to express to you my deep appreciation of the honor. To be elected to the chief office in a society which represents so much of the medical life of a great city is something of which any man might be proud. Limited though it is in numbers, within the membership of this Society are found many of those whose eminence as clinicians has gained for the medical profession of Toronto the place it now holds in the confidence and esteem of the community, and whose ability as teachers and wisdom as counsellors has contributed largely to mould the medical thought and direct the policy of our profession during one of the most important periods in its history. While appreciating the honor, equally do I realize the responsibilities which the position involves, and how much one lacks the qualifications to properly discharge them. I shall continue, however, to rely on that personal kindness and friendship which has been one of the most valued assets of my professional life, and shall ask of you and my associates in office the same sympathetic and loyal support so freely accorded my predecessors in the chair. During my tenure of office I can assure you that my best efforts will be devoted to maintaining the high character which has distinguished the work of this

*Presidential address, delivered before the Toronto Clinical Society, Oct. 10th, 1906.

Society since its organization, and which has made the meetings so valuable to us all.

It is not my intention to occupy much of your time this evening with any introductory remarks. Not that the present is an inopportune time, nor that a Clinical Society is an unsuitable place to discuss many matters of importance to the profession of our country—matters which the rapid evolution of events will force upon our consideration in the near future, and in the solution of which a society of the standing and influence of this must play a considerable part.

The epoch-making nature of the events which have been taking place around us since the organization of the Clinical Society in 1893 must have occurred to all of us, not in the medical profession alone, but in every line of intellectual, industrial, commercial and political activity in our country. After long years of waiting and hope deferred we are privileged to live at the beginning of the century which by common opinion belongs to Canada,—an era which is to witness the transformation of an obscure colony into one of the great nations of the world. Our illimitable natural resources and opportunities are attracting attention from all quarters of the globe. Ever alert, financial, commercial and industrial interests have quickly grasped the situation, so that on every side we see an extension of enterprise, a broadening of foundations and a perfecting of organization to meet rapidly growing requirements, and to take advantage of the golden opportunities which the future has in store.

It therefore appears a fitting time to glance at our own profession,—its past history, present condition and future prospects. As an index to our hopes it is instructive to recall the transformation which a century has produced in the country which is so frequently compared to our own. At the beginning of the last century the United States had a population of about 4,000,000. The first medical school in that country, now the Medical Faculty of the University of Pennsylvania, had been established only thirty-five years; the Medical Department of King's College, N.Y., now Columbia, thirty-three years; Harvard seventeen years, and the Medico-Chirurgical Faculty of Maryland eleven years,—all struggling institutions, whose influence at that time had produced no effect on the medical world at large. In the whole country there were but two general hospitals, one medical journal (*The Medical Repository*, New York, 1797), and the only medical libraries were one each in connection with the hospitals of New York and Philadelphia. For the education of

medical students the old apprentice system was still largely in vogue.

Reflection on the position of the profession in our own country, our medical laws and institutions, at a corresponding period in national development, is indeed reassuring, and must impress us with a deep sense of the gratitude we owe those worthy pioneers, the military surgeons, who at the beginning of the last century were laying the foundations of the profession in this province. We, of the present generation, are reaping the advantages of the high ideals by which they were actuated, and of the strenuous efforts they put forth to establish and maintain in a struggling colony the honorable character and traditions of the profession of the motherland. From the view-point of the present it would be not only instructive but inspiring to look back and consider for a moment what manner of men they were, these pioneer surgeons, the difficulties they encountered, what they accomplished, and to trace their influence on the evolution of the profession in the province: but the time at my disposal will permit of only a brief reference to them. They were men socially of high rank, and certainly well abreast with the advancement of medicine at that time, thoroughly trained in the schools of London, Edinburgh and Dublin at a period made brilliant by the labors of the Hunters, Edward Jenner, Percival Pott, Benjamin Bell, John Bell and other great teachers. They possessed a wide experience, not only of medicine, but of men and affairs, gained by active service during the wars of that period. The influence of these early military surgeons had been indelibly stamped on the medical profession of the province, and has been an important factor in giving character to our clinical teaching and practice. To their efforts we are indebted for the first efficient legislative control of the practice of medicine, obtained by the Medical Act of 1818, under which the Medical Board of Upper Canada was created. From that time until its last meeting in 1865, immediately before the formation of the College of Physicians and Surgeons of Ontario, this Medical Board guarded the entrance to the profession and practically controlled the medical affairs of the province. Up until 1830 the influence of the military element in relation to the medical profession was practically supreme and undisputed. In the very nature of things they were in close touch and sympathy, and evidently possessed the confidence of the Governors and the Executive, which, in the period preceding the Mackenzie Rebellion, administered as they deemed best the affairs of the province. This intimate association of the founders of our profession with the

all-powerful Family Compact was a potent factor in securing the sympathetic co-operation and often active assistance of the early Governors and other branches of the Administration in establishing the profession on a proper basis. In this connection it is pleasant to note, in parenthesis, that the profession in the early days had a warm friend and able advocate in the Rev. Dr. Strachan. In all ages, the true followers of Aesculapius have had to deplore the ease with which too frequently clerical support has been enlisted on behalf of their enemies, the rapacious irregulars and quacks who fatten on the ignorance of the laity in matters medical, but the prevalent quackery of the days prior to the Medical Board got no quarter from this strenuous ecclesiastic.

It was through the efforts of the military surgeons that the General Hospital was established in 1819, at a time when the population of Toronto was less than 1,200. The outstanding figure among them, who for thirty-five years was chairman of the Medical Board and the recognized leader of the profession, was Dr. Christopher Widmer. Resigning his commission in the service, and undertaking civil practice in York in 1815, at a time when the medical needs of the population could no longer be properly cared for by the surgeons attached to the garrison, for many years he had practically a monopoly of the practice of the town, and until his death in 1858 his name appears in connection with every movement for advancing the welfare of the profession. When Dr. Widmer began practice there were only about forty regularly qualified doctors in the province. He was one of the founders and first President of the Medico-Chirurgical Society of Upper Canada, established in 1833. A perusal of the minutes of the Medical Board during his thirty-five years as president indicates his broad grasp of medical politics and illustrates with what constancy, courage and military precision he directed its proceedings. In speaking of him, Dr. Osler says, "One picture on the canvas of those early days lingers in the memory, illustrating all the most attractive features of a race which has done much to make this country what it is to-day. Widmer was the type of the dignified old army surgeon, scrupulously punctilious, and in every detail regardful of the proprieties of life." Dr. Christopher Widmer has therefore justly been called the Father of Medicine in Ontario. He and his associates on the Medical Board were early and vigorous advocates of the necessity of providing for the medical education of those desiring to enter the profession in the province, and they were largely instrumental in securing the establishment of a medical

department in King's College when that institution began operations in 1844. Tories by instinct and association, they had an antipathy to everything American, born, no doubt, of the Revolutionary War, perpetuated by the influence of the United Empire Loyalists on the politics of Upper Canada, and intensified by the experiences and memories of the War of 1812. This ever present fear of American influence was one of the chief reasons continually urged on the Government of the importance of establishing a medical school in Upper Canada, so that our students might be educated at home, without their loyalty being exposed to the possibly too democratic atmosphere of New York and Philadelphia. Between 1830 and 1840, however, with the gradually increasing population, another element became prominent in the medical as well as in the political affairs of the province. They were not of the military type, nor were they the favorites of the Family Compact; consequently they soon came into opposition alike with the Government and the dominant medical faction. Much dissatisfaction arose from the composition of the Medical Board, the control of the examinations for license to practise, the administration of the General Hospital and other public medical institutions. This discontent culminated in the calling of a public meeting in 1836, at which these grievances were ventilated, and resolutions adopted for transmission to the Government, embodying many suggestions for reform. Resolution No. 4 reads as follows: "That it is the opinion of this meeting that over the Hospital of this city a veil of obscurity impends which it is highly advantageous to have removed. No appointed days await the attendance of medical men in connection with the institution; no published reports inform the public of the number of those who have been restored to their friends, cured of their infirmities; the passing bier alone affords a melancholy proof that the institution still exists in active operation." The clouds of discontent were evidently deepening over the medical as well as the political institutions of the province. The struggle for responsible government was being bitterly prosecuted, and in the movement no class of the community took a more prominent part than a section of the medical profession, of whom Drs. John Rolph, William Warren Baldwin, Thomas David Morrison and Charles Duncombe were the leading spirits. It therefore appears how inevitably a breach in the medical profession occurred between the adherents and intimates of the administration and those who espoused the cause of reform. Of the latter, Dr. Rolph was for many years such a conspicuous figure in the medical affairs of the province that to us his career

is of unusual interest. He was a student of Guy's and St. Thomas' Hospitals, and a pupil of Sir Astley Cooper's; at the same time he studied law and became a member of the Inner Temple. He first devoted himself to the practice of law, being called to the Bar of Upper Canada in 1821. By his great intellectual endowment and eloquence he soon acquired a large practice and became one of the leaders of the profession. Early at variance with the judiciary, owing to his political views, in 1828, dissatisfied with a decision of Justice Sherwood, he with Dr. William Warren Baldwin (who also practised dual professions), threw off his gown and left the court. He thenceforward devoted himself to politics and medicine, passing the examination of the Medical Board in 1829. He was then nearly forty years old, and his subsequent career is a brilliant example of a man's capabilities in medicine after that age. He soon attained a position in the medical profession as eminent as the one he had forsaken in law. He was appointed a member of the Medical Board in 1832, and for some years was an active advocate of a medical department in the projected King's College. Of the part he played in the struggle for responsible government, his association with the Rebellion, and his six years' exile in Rochester I shall say nothing. Returning to Toronto in 1843, out of touch and sympathy with the newly created medical faculty of King's College, he established a private school in rivalry with that institution, which afterwards became known as the Toronto School of Medicine. These details are given to show that in the beginning political disagreement at that period was responsible for producing school divisions and rivalries, which affected the profession of the province long years after the original cause was forgotten.

In 1850, after the ascendancy of the Reform party, King's College passed from under the control of the Anglican Church and became a secular institution under the name of the University of Toronto. Through the efforts of Rev. Bishop Strachan, Trinity University was then established in connection with the Anglican Church, and the Upper Canada School of Medicine was constituted its medical faculty, with Drs. Hodder, Bovell, Bethune, Hallowell and Melville as lecturers. This school, however, lasted only a few years. Owing, it is said, to the influence of Dr. Rolph in the Reform Government of Sir Francis Hincks, the Medical Faculty of the University of Toronto was disestablished in 1853.

In 1856 a disagreement arose between Dr. Rolph and his colleagues, Drs. Aikins, Workman, Langstaff, H. H. Wright and

Morrison, of the Toronto School of Medicine, a separation occurred, and after some litigation Dr. Rolph established a school in Yorkville, which became the Medical Faculty of Victoria University. As such, due largely to his wonderful powers as a teacher, this school had a prosperous career until Dr. Rolph's death in 1870.

The resuscitation of the old Trinity School shortly after this time by Drs. Geikie, Hodder and others, the reorganization of the University of Toronto in 1887 with the Toronto School of Medicine as its medical faculty, with the subsequent events leading up to the amalgamation of Trinity in 1903 are matters so familiar to all as to require no reference to them.

Kingston was early an important centre, medically speaking. The Kingston General Hospital was completed in 1835, with a capacity of 120 beds, Dr. James Sampson being its first physician. The Medical Faculty of Queen's College, Kingston, was organized in 1854, chiefly through the exertions of Dr. J. R. Dickson and Dr. Horatio Yates, with the able support of the late Sir John A. Macdonald.

We are thus able to trace the influences which led to the formation of the various medical schools in Ontario between 1843 and 1856.

Of Dr. Rolph, it is difficult even yet to estimate the value of the service he rendered the profession in this province. He represented a strong independent sentiment which won many adherents. He apparently commanded the admiration and affection of his friends as much as he aroused the bitterness of his enemies, but all had to respect his ability. An unprejudiced judgment must acknowledge him as a great teacher whose view of medical affairs was at times biassed by his strong political convictions. Dent says of him: "He possessed talents which under favorable circumstances would have made him a marked man in either political or public life in any country. Chief among his qualifications may be mentioned a comprehensive, subtle intellect, high scholastic and professional attainment, a style of eloquence at once ornate and logical, a noble and handsome countenance, a voice of silvery sweetness and great power of modulation, and an address at once impressive, dignified and ingratiating.

For us of the present day, forgetting the differences of the past and the causes which produced them, we cannot look back on the history of the profession in this province without a feeling of admiration for the ability, courage and foresight which characterized those who labored so earnestly to establish its founda-

tions on a basis which enables us to begin the century free from the difficulties with which they had to contend. The founders of our profession were men of whom we may well be proud, not alone for their achievements in medicine, but for the important part they played in the social and political development of the province. Widmer, Rolph, Baldwin, Bovell, Hodder, Workman, King, Gwynne, Bethune, and later Aikins, Ross, Fulton and Graham, are representatives of a group of men who must always command our respectful admiration and regard. A few of the same type still remain with us. Some have retired from active work, others still in the harness distinguish their calling. These doctors of the old school furnish many examples of all that is implied in the best sense of the term gentleman, high in ideals, scrupulous in honor, dignified in bearing, broad in culture and courageous in their adherence to principles. In this age of material prosperity, and lacking much of the environment which developed their characters, it will be no easy task for their successors to maintain the standards they set as citizens as well as physicians.

In the evolution of our system of medical education, the traditions and methods of the London schools, of which most of the early members of the profession were graduates, exerted the greatest influence. The schools of Edinburgh, Glasgow and Dublin furnished many able representatives, but on the whole they played a secondary role; in fact, until 1839 their graduates were not recognized by the Medical Board on an equality with those of the London schools,—a cause of much dissatisfaction in the early days of the province.

It is interesting to note here certain causes which have helped to determine differences between the educational and clinical methods of the American profession as compared with our own. The important influence of the military element has already been alluded to. Another potent factor arose from the estrangement between the United States and the mother country following the Revolution, on account of which American students went to Paris instead of to London. There, at the beginning of the last century, they came under the influence of the great teachers who laid the foundations of modern clinical medicine—Bichat, Laennec, Corvisart, Louis and others. The scientific and clinical awakening of the French Pathologico-Anatomical school did not reach Great Britain until about the thirties, at the time of John Cheyne, Graves, Stokes, Bright, Addison, Latham, and others, all of whom came under its influence. Through their students it extended

to Canada between 1830 and 1840. The French school maintained its position until the time of Trousseau (1866), when the German influence began to dominate medical thought and progress. Vienna and Berlin then became the centres of attraction for American students. The American profession then passed under the dominating influence of Virchow and his followers, where they have remained until the present time. In contrast to ourselves, during the greater part of the past century, French and German methods have been much more powerful than British in moulding the medical thought of the American profession. That we have been affected by French and German scientific methods, especially in later years through our close association with Johns Hopkins, goes without saying, but they have been modified by passage through English channels. The majority of our students still go to London rather than the Continent. Whether this has been a misfortune or not is a debatable question. If we missed the direct quickening influence of the scientific awakening of the French and German schools, we have avoided the therapeutic nihilism which followed in its wake. If our medical horizon has thereby been narrowed, if we have remained too much under the thralldom of authority, having accomplished little in the way of original investigations, we have avoided the tendency which in some schools has made the study of medicine an accumulation of dry scientific facts obtained by the observation and research into the phenomena of disease as exhibited by plants, animals and man in the aggregate, rather than of an art which has for its main purpose the prevention or relief of pain and suffering as it affects the individual. Moreover, what Osler says of the American profession applies equally to our own: "Justice compels us to acknowledge that while winning an empire from the backwoods, the people of this land had more urgent needs than laboratories of research." Medicine with us, as with the English-speaking people in general, has been essentially utilitarian and practical, exalting the art rather than the science. "Sydenham, not Lineacre or Harvey, is the model English physician in whom was concentrated all those practical instincts upon which we lay much stress in the Anglo-Saxon character" (Osler). As the result of this practical trend our race may lay claim to most of the great discoveries which have lessened the suffering of mankind. Sydenham introduced the treatment of malaria by quinine, Jenner discovered vaccination, Simpson and Morton general anæsthesia, and Lister the use of antiseptics in surgery.

There is apparently a movement at the present time to pursue

scientific work along lines of more immediate value to the clinician, as exemplified by the revival of interest in the study of therapeutics, and the brilliant researches of Sir A. E. Wright. This closer association of the science with the art of medicine will more strongly appeal to men of our race. The maxim of Sir Astley Cooper still reflects the attitude of the majority of our profession: "Profound erudition is good for a man of means—useful and practical knowledge for the physician and surgeon."

The outlook in all branches of medicine was never so bright as at the present time, and in the progress that is bound to take place during the twentieth century no country is more favorably circumstanced than our own for playing an important part. That Canadians are possessed of the intellectual capacity, the energy and the zeal, has been amply demonstrated by what our countrymen have already accomplished, and it should be a source of no small degree of pride to a country so young that Dr William Osler, a fellow-citizen, should be the greatest living exponent of internal medicine. As for Toronto, the most favorably located city on the continent, medically speaking, with a great university, one of the largest medical schools in the world, with the assurance in the near future of the best hospital facilities and abundance of clinical material, with a medical profession unsurpassed in the average of attainment, and supported by a country of unlimited resources, if we avail ourselves of the opportunities presented, and fulfil our stewardship to posterity as faithfully as the Fathers of Medicine in the province did for us, we may indulge the most sanguine hopes of its future as a centre of medical activity.

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THE INDICATIONS FOR CYSTOSCOPY.*

BY DR. MILLETT (of the Mayo Clinic).

Mr. President and Gentlemen,—In a way, you might say that the indications for cystoscopy would be any case which had pain or a feeling of weight in the region of the bladder, and to a great extent I believe that is true in very nearly every such case which comes to us. I believe every such case should be cystoscoped. I have not much sympathy with the notion that the cystoscope ought to be one of the last things employed. I believe it is a more satisfactory thing to do, especially in a badly diseased bladder, than sounding with a catheter. I have seen bad results from a catheter, and I have sometimes seen bad results from a cystoscope, but not very often. But with the exception of acute cystitis, all cases which have these symptoms are almost always cystoscopic cases. I do not believe it is necessary, in the face of a good history, which has come on within a week or ten days, to subject your case to the discomfort of a cystoscopic examination, because your clinical history is generally such that you can make a safe diagnosis, providing that you don't allow a case of acute cystitis to go drifting along until it becomes chronic before doing anything. These are the cases which, after ten days or two weeks, if not getting better, should be cystoscoped without delay. To enlarge upon some of the conditions which especially call for cystoscopic examination, will be the main subject of my talk. To begin with, those of you who do surgery, especially prostatic surgery, have been struck with the conditions that we find two times out of ten, in which, after taking the personal history of the case, you will have your mind made up that it is a prostatic case, and you make an examination, and are surprised to find that there is very little evidence that prostatic hypertrophy is the cause. Sometimes one of these old fellows won't have much hypertrophy; still he may be drawing his urine with a catheter. Now, what would you advise? Would you advise an operation upon the prostate? You cannot do that unless you can find some evidence that the prostate is the cause of the symptoms.

For instance, stone in the bladder, a tumor, and various other conditions might produce much the same symptoms that a hypertrophied prostate would, and the only way of finding out what

* Delivered before the Surgeons Club of Rochester, Minn.

the trouble is is to use the cystoscope. Then you can find out if there is one stone or more. Sometimes when on account of fat you could not feel anything, there are little lobes which may be no bigger than the end of your finger which act like ball valves and cause the difficulty in micturition. They may be quite large and still you may not be able to feel them at all with the fingers, but very often they are small lobes that tip up toward the front of the bladder: a condition which you could not make out in any other way. It would be absolutely impossible. In every case of prostatic hypertrophy which you expect to operate upon the cystoscope should be used. We don't always do it. We ought to do it more than we do.

Suppose your case is complaining of a little more pain than you would expect in prostatic hypertrophy. You won't be satisfied in your own mind whether or not it is prostatitis or stone in the bladder, and you may put a sounder in and feel a stone. As often you won't find it is there. But the most important thing is not exactly to know that there is a stone there, but if it is a large prostate it is of quite as much importance to know, not only whether there is a stone there, but how many stones there are. You know it is impossible to get the finger through the perineal opening into the bladder. You cannot get into the bladder with your finger at all. If they know there is a stone there they have to fish around until they can get at it. But suppose there are four or five stones in the bladder, and the operator does not know how many there are. He removes the prostate, puts in his forceps and pulls the stone out, and don't feel any more stones. That is the end of it. But we have had it happen here that afterwards the case has had much pain, and they have found that the operator left a stone, or two, or three, or four, or five. One stone is enough to cause the man's pain. The operator takes out a stone, and he don't feel any more with a pair of forceps. Often you will find but one stone when there are a good many there. I have seen a bladder that had eight or ten stones in it. So it is impossible to know how many there are. You see how easy it would be to leave a stone or two there where there are multiple stones, because you cannot feel with your finger, and you are just as bad off as we used to be with the sounder: if we did not feel it we could not say. Put the cystoscope into a man, and when you have finished, and said there is no stone, you can stake your reputation on it. You cannot always be absolutely certain of the exact number, but you can come nearer than without a cystoscope. One stone may be behind another, and you may miss it. If there is an area of the bladder you can-

not get to, and a stone is located there, another may be behind it. If you have been all over the area of the bladder with a cystoscope you can say there are three or four or five, as the case may be. This is a pretty hard proposition. So much for the prostatic cases. I want to emphasize the point I made first: that is, in cases where you cannot feel anything with the finger. It is impossible to get these remnants of the prostate out through the perineal opening, there almost always being a certain amount of shrinkage. We have had it happen in cases where a fair-sized opening remained, but these little remnants stuck up. These cases often would have much trouble; even with a great, big orifice they would have to use instruments to take the urine, because these little lobes were sticking up there yet. I could take old men out of bed and use the cystoscope; and often if I let them alone they will get well anyway, and these lobes will shrink up so that they can micturate all right.

Now, there is a class of cases which are not very satisfactory to anybody. These classes complain bitterly of pain in micturition. Of course, a man doing general practice will sometimes make a correct diagnosis without, but the only way to be sure is to look in and see, and we make it a fairly uniform practice to cystoscope these cases. It is the safest thing to do, and it does not take long to find out. It is the very bad cases that take longer. It is the safest thing to examine these cases and see if there is anything in the bladder or not. In connection with this, don't be deceived by certain conditions which are quite often met with; that is, red spots in a woman's bladder. I think they are sometimes a congestion or a red area produced by straining. They may have been making the urine every five minutes for a day or two, and if they come to you about that time you are apt to find a red area up near the posterior orifice. It is the part which receives the most pressure, and it is very easy to conceive that it should become red. I do not think that this is ever the cause of the trouble, but simply one of the effects of the frequent micturition. I don't think it amounts to much, but I simply mention it to prevent you from making a diagnosis of something bad. Don't make a bad prognosis of it.

There is another large class of cases which come to us complaining of pain in one side or the other, the most frequent, of course, being those which complain of pain in the right side. Some are cases of gall-stones; some are classical cases of duodenal ulcer. They are so distinct from kidney trouble that they don't need a cystoscopic examination. Between these classical cases and cases which show cystitis on the face of them there is a number

of cases that have a certain amount of conflicting elements. In how many cases, you just happen to think of it, and ask him about his bladder, and he tells you about spells he has had and in some cases you find the urine looked like blood. You cannot turn your case right off and say there is nothing the matter with that right kidney. The only way to find out is to look and see. Then there is a class of cases which come to you with tumor in the side which may appear to be a gall bladder and may appear to be like a kidney. How are you going to determine which it is? It may be any one of three or four things. It may be a moving kidney. It is pretty hard sometimes, and the only way I know of is to go to the bladder and see if there is healthy urine. If so, you can be reasonably safe in saying the tumor is not a kidney. There are very few exceptions when you get healthy urine from a tumor of the kidney. Hypernephrosis may produce blood. It is another thing when there is not enough kidney left to produce blood. A tumor in the side, in connection with this, is another thing in which the clinical history would be of more value than anything else. Most kidney tumors are movable, so if there is pain in the side and healthy urine you can make up your mind that this tumor is not of the kidney. It is a lot of satisfaction to be able to say that, lots of times.

Sometimes hypertrophy of the kidney is caused by a tubercular condition in the other kidney. In many cases of a tubercular kidney, there is an absolutely healthy bladder. The great majority of the cases have something in the bladder to indicate the trouble. Then what do you find? In the first place, there are small red spots which are circumscribed, and the healthy mucous membrane comes right up to the spot, very different from the spots in the neurotic woman's bladder. They blend out to the natural color of the mucous membrane. Now, this condition may be a sort of lupus, like that on the skin, which never gets any farther. I am inclined to think that these spots are the same things that produce ulcers. I have never had a case in which I could observe the different steps. I see the different conditions in different cases. When the ulcer comes it is clear-cut. The ulcers are red or gray. Most of the cases I have seen have been red, although the doctors say they are gray. Nothing else will produce anything like that kind of an ulcer. The ulcer appears red, and if you touch it it bleeds: rubbing will produce a hemorrhage. These ulcers may be at the spot where the dropping of the urine leaves a sediment. There may be trouble in the urethral meatus, but I do not know of as many cases of this as of vesical ulcer. Sometimes there is a stiff wall over

the ureter, which stands open like a gaspipe. You stick a catheter into it. There may be a whole lot of room beside the catheter. It don't mean a tubular ureter. I have seen it in ureteritis from stone. Then there is another condition that is almost pathologically like this. It is shrinking of the ureter. When the ureter shortens it pulls the bladder out. You look it over and see the funnelled appearance of the bladder, and you cannot see any ulcer. That means a tubercular condition ninety-nine times out of a hundred. These are some of the special conditions found in the bladder which indicate tubercular disease. Of course, the bacilli in the urine is the proof positive. But you cannot always find it if it is there. It is not always there. That is in cases where there are old, dead kidneys. Then you do not find the bacilli in the bladder. It runs from seven to eight out of ten cases that we do find it. In every one of these cases the diagnosis has been made as tubercular by the bladder appearance, together with the history of the case. If you get the history you will find that frequently urination is the only symptom. At one time I looked it over—I have not lately—and at that time I found that thirty per cent. of our cases never had a pain or an ache of any description. Sometimes the neurotic cases complain of pain. If they have no pain don't exclude tuberculosis, and don't expect them to be emaciated, hectic, etc. In these cases the bad kidney is dead, and the other kidney has taken up the work until it is a great, big kidney. Don't think because it is a tumor of the kidney even that it is too large. Many of these cases will come in complaining of frequent making in water, and they have a big kidney. There is every reason to suppose that the other kidney has ceased to be a kidney years ago. It is nothing but a shell, and you have a great, big, hypertrophied kidney on the other side doing the work of two. We have learned a great deal in the past few years about operating on these cases. The time was, in certain cases of extra-uterine hemorrhage, that a woman was sent off to the hospital and immediately operated upon. Now we know that not one of five hundred will bleed to death. Of course they may get pretty anæmic and lose a whole lot of blood, but they generally come out all right. It is seldom that they die. And, speaking of tubercular kidney, we don't believe it is necessary to operate in every case of tubercular kidney. There is no reason to believe that tuberculosis of the kidney has not been cured, but the point I want to impress upon you is: don't spend too much time trying to cure kidney tuberculosis, but keep track of it. Know about how much urine and what kind of urine there is, and

whether there are bladder involvements. At the first indication of bladder involvement it is time to act. But where you find that the large kidney is making healthy urine, are you going to take out the other and leave all the work to that kidney to do, or will you leave it to gradually prepare to do the whole work? There are cases that have come here within the last year. They have a tubercular kidney and a good kidney. The tubercular kidney may not be much use, but it is a kidney. If the patient is healthy, especially if a young woman, she may get well. You don't know. The thing to do is to wait, and if there is no bladder involvement the other kidney will slowly take up the work, and it is a whole lot better than to take the tubercular kidney out and at once put all the work on the other good kidney.

The stone cases are usually pretty plain. A good radiograph which will show the bone structures of the transverse processes will show a stone. If you can get that kind of a radiograph and you don't have any stones show on the plate, you cannot say but there is something that can be done with the cystoscope. That may lead to a correct diagnosis. You may find that there is nothing coming from there but a little pussy urine, and perhaps nothing but pus. You don't know whether it is a stone case or not. You know it is a dead kidney. Nothing else will produce it. If there was any healthy tissue the pus would be diluted. So when the thick stuff comes down there is no kidney left. I have sometimes seen a stone stuck halfway into the bladder. In one instance it stuck into the urethra and ulcerated through the bladder and formed another passage. If you fail to pass the catheter through, there may or may not be obstructions. One indication is not proof. Your catheter may have struck a fold of membrane. You may put it back and repeat it four or five times, with the same result. It is suggestive, but it is not proof. There may be a stone and the stone may slip by the catheter. Even Kelly's practice of waxing may be of assistance. The middle of the tube might strike it, and if you failed to find a scratch on the wax you would not be any the wiser. Urine may come down where the catheter will not go up, and sometimes urine will not come where the catheter will pass through. Of course, a stone in the urethra can just as well be radiographed. There is this much about the use of the cystoscope: if there is a stone of any kind in the urethral opening you can always draw it out with a pair of forceps.

In one case, the case of a woman, with one finger in the vagina and another in the bladder I had the stone between my two fingers and envaginated the bladder well into the urethra.

My idea of the two fingers was to squeeze it out. I could not. By using the cystoscope I was able to work it into the bladder.

There is one other special point that I want to speak of; that is, hydronephrosis. Just a few words and I am through. Sometimes they have a tumor in the colon and symptoms of obstruction of the bowels, vomiting, chills, etc.

We had a little boy here, ten years old, who since he was three years old had had frequent attacks of pain, vomiting and absolute inability to get the bowels to move. With such conditions he had been treated almost invariably for obstruction of the bowels. These spells would last three or four days. It seemed to be obstruction of the bowels, but we were at a loss to diagnose it, as there was no bloating, and obstruction of the bowels will always produce bloating. He happened to have one of those spells here in town. They called me down to the house to see him. He had a very large kidney. In twenty minutes he was opened up and a quart of fluid taken from his kidney. On account of a kink in the ureter he had been suffering all that time.

Then there is the class of cases that are neurotic. They have symptoms of hypernephrosis. I don't really understand much about them yet. Some of them we have here in town. We have been very prone to send them home without operating. Ten or twelve years ago they were operating for moving kidney everywhere. A woman came in and you told her she had a movable kidney and must have an operation, and lots of times she had it and the same symptoms came back, so that the operation fell into disrepute, and they would go home and not get well. But where there is no improvement, these cases should be operated upon, even if they have neurotic symptoms.

Clinical Department.

A Study of Two Unusual Brain Tumours. GORDINER AND CAREY, in *Journal of Nervous and Mental Diseases*, 1906, p. 1.

CASE I. Multiple cylindroma involving the 2nd, 3rd, 4th and 8th cranial nerves, and producing symptoms closely simulating a tumor of the quadrigeminal bodies.

Eight months before his death a laborer of 49 commenced to suffer from headaches and dizziness, then from noises in each ear. A few weeks later he became deaf, first in the right, then in the left ear, and in the course of three months developed a markedly unsteady gait. An examination showed: Pupils unequally dilated, left the larger, sluggish to light and accommodation; eyeballs fixed, moderate divergence, the only movement in a slightly upward direction; double ptosis and optic neuritis with failing sight; muscles of face, tongue and palate unaffected; sensation of face normal, no rigidity of neck; smell and taste unimpaired; marked deafness in both ears to bone and air conduction; patellar reflexes lively, others normal; no tactile or stereognostic symptoms; cerebellar gait; memory failing and cerebation slow; a slight degree of arterial sclerosis and emphysema. Death from exhaustion. The order of occurrence of focal signs, viz., tinnitus aurium, deafness, cerebellar gait and ophthalmoplegia, suggested a growth in the region of the quadrigeminal bodies. The authors explained the ophthalmoplegia by a ventral extension of the growth, the tinnitus and deafness by irritation and destruction of the central auditory tracts, "lateral fillets," and the inco-ordination to a compression either of the central part of the median worm or the ventral peduncles of the cerebellum. Iodides and mercurial inunction were tried without benefit.

Autopsy.—A tumor, 3 by 2.5 cm., occupied the inter-peduncular space involving the optic nerves and commissure, and also the 3rd and 4th nerves; about 15 other tumors, varying in size from 0.5—0.2 cm., were scattered asymetrically mainly over the surface of the brain, brain-stem and cerebellum and in the angle between the caudate nuclei and corpus callosum in the lateral ventricles. Both 8th nerves were involved in the cerebello-pontine angles, and at their exits from the internal auditory meatus. The smaller tumors stripped off with the visceral layer

of the pia, but the larger tumors infiltrated the cortex. They were grey and like soft cartilage.

Microscopically, the tumors consisted chiefly of a homogeneous, refractive, hyaline-like material, the basement substance occasionally showing striations or fibrillæ, and enclosing cells in spaces which were more numerous in the region bordering the cortex and grew more scarce as the pia was approached. The looser portion of the basement material bordering the cells stained like mucus, and the denser portions like the hyalin of cartilage. The cells form "irregular masses of multinucleated protoplasm often vacuolated and containing droplets of fluid" like syncytium, but elsewhere the matrix was denser and resembled hyaline cartilage. It was not hyaline cartilage, however, because there was no connective-tissue from which it could be formed, the endo- or peri-thelial cells which originated the growth being a differentiated form of mesoblastic origin, but not true connective-tissue. These cells in their growth manufactured the ground substance, as was seen by the droplets. At the periphery the method of growth was seen, the syncytial masses being here elongated occasionally with rudimentary vascular channels enclosed and surrounded by the mucinous material and the masses of cells so described above; these latter eventually obliterated the rudimentary vessels. Swollen endothelial cells of the pia at the border of the smaller growths gradually disappeared as the central portion was being atrophied by pressure.

The growths, therefore, start neither from the pia nor from the cortical tissues, inasmuch as they could not be traced to any of the fixed tissues. The authors think that they sprang from vasoformative, mucinogenous cells included in the brain during its early development. The tumors were not very malignant, owing to scanty blood supply. That they were of this developmental nature is shown by their appearance at the base near the line of closure of the cerebral vesicle, by their syncytial appearance and by the multiplicity of growths which are not metastases. Bilotz called such growths cylindroma, and the authors class their case as a hæmangio-perithelioma cylindromatosum. They say that though multiple endothelial tumors of the brain are not infrequent, such an extent of hyaline degeneration as occurred in this case has not been previously described.

CASE II. A neuro-epithelioma of the choroid plexus of the 4th ventricle growing dorsally; symptoms of a tumor of the median lobe of the cerebellum.

A boy of 10, with symptoms of cerebellar tumor (median

lobe), viz., headache, optic neuritis, marked dizziness, swaying to the right, slight nystagmus, with lively knee-jerk on one side and later tenderness over occipital and parietal bones with rigidity of neck muscles. During the last week of the illness, which ended fatally in four months, attacks of dyspnoea, dysphagia and hiccough with rapid and feeble pulse supervened. Two months before death he had an attack of transient unconsciousness.

The autopsy revealed a vascular tumor 3.5 by 2.75 cm., springing from the choroid plexus of the 4th ventricle and penetrating the velum to invade the vermis cerebelli. There was a marked degree of hydrocephalus.

Microscopically, there were two types of cell, one like a lymphocyte and the other an irregular cell giving off branching fibres glia fashion. These cells are often grouped with nuclei peripheral and protoplasm central, but with no lumen. In the centre of the tumor, however, where the capillaries are numerous, are many "rosettes," consisting of a central small vessel surrounded by layers of cells, the innermost having nuclei peripheral and protoplasm centrally disposed and sending out towards the capillary wall fibres. These cell masses occasionally undergo hyaline degeneration which commences in the vessel wall and spreads outwards. The ependymal cells lining the interior wall of the velum are normal, but as they approach the border of the tumor they are flattened and reflected over the outer surface of the growth and gradually emerge into the glial-like cells of the growth—a metaplasia or metamorphosis into embryonic form, the authors think.

Flexner named this form of tumor neuro-epithelioma, and described one arising from the external nuclear layer of the retina. They have also been called ependymal gliomata, but wrongly, as the growth arises from epithelium and not from glia. Ependymal tumors are uncommon. Flexner described two, Mallory three, and Neuthmann has collected fourteen from the literature. In one of Mallory's cases the growth, the size of an orange, was located in the mid-line of the coccyx.

DURING the performance of a hernia operation it is often helpful for the anesthetist to allow the patient to react sufficiently to strain into view a sac that has slipped back into the abdomen.
—*American Journal of Surgery*.

IN the presence of large masses of glands in the epigastrium, especially on the right side, examine the testicles for new growth.
—*American Journal of Surgery*.

Fracture of the External Condyle of the Humerus. W. E. HOME, M.D., Edin., Fleet Surgeon, R.N., in *The Lancet*.

Fracture of the external condyle of the humerus is so uncommon an accident that it may be well to put a case on record.

On July 28th a stoker on H.M.S. *Exmouth* caught his right elbow under the cross-head of a hydraulic engine. So violent was the blow that his arm bent the rim of a cast-brass lubricating cup. On examination he was found to have a lacerated wound on each side of the elbow. From the inner wound the finger passed through lacerated tissues down to the front of the humerus. Within the outer wound the muscles were slightly lacerated, the skin was partially separated even where not ruptured, and about an inch of the external condyle and supracondylar ridge was found lying free. No arteries bled. The loose piece of bone was fixed by a suture through its adherent soft parts. The wounds were drained and sutured (one deep silk-worm gut suture of relaxation, the others catgut continuous), and the elbow was put up in cotton wadding with elastic bandage over all. The drain was removed from the inner wound on the second and from the outer on the third day. The after-history was uneventful. The wound is now under cyanide gauze and collodion.

Raynaud's Disease. ROBERT ABRAHAMS, M.D., Instructor in Medicine, New York Post-Graduate Medical School and Hospital; District Physician Mt. Sinai Hospital; Adjunct Dermatologist Lebanon Hospital, in *The Post-Graduate*.

Israel K— is fifty-nine years old. Family history negative. Personal history: Has always been in good health. Never suffered from an infectious or contagious disease. Never had gonorrhea or syphilis. His lungs, heart and kidneys are in good condition. The arterial system so far as could be ascertained is normal. He gives a history of exposure to cold, dating back nine months ago. Shortly after the exposure he noticed "blue spots" on the instep of the right foot. Coincident with the appearance of the spots he began to experience pain in the last phalanx of the great toe. The nail of the toe underwent some atrophic changes. His physician advised him to remove the nail. The latter was removed, but the pain remained.

Two months after the onset of the affection the left foot became similarly involved. At present, around the borders and

extending to the middle of the back of each foot, there are areas of dull red and bluish discoloration. These areas are not of equal size; they come and go, etc.; at times they occupy almost the entire dorsum of each foot, and then the color is distinctly violaceous.

The occurrence of such total asphyxia is quite frequent, every week or ten days.

The subjective symptoms are pain and heat. The pain is continuous and aggravated during a paroxysm, that is when the feet become all blue. The character of the pain is sometimes dull and sometimes lancinating. The sensation of heat is always present, even when there is marked cyanosis.

I regard this case as Raynaud's Disease belonging to the type which is characterized by local asphyxia. The treatment in this case consists in the application of a thirty per cent. ichthyol ointment twice a day. This ointment affords the patient more relief than any other remedy that was tried, both internally and externally.

DISCUSSION.

PROFESSOR LUSK.—This case was under my care in the dispensary. I did not regard it as anything more serious than chronic chilblain, for which I treated him. The patient being a Russian and speaking no English, I could not understand him, consequently the history obtained of the case amounted to nothing. He is doing much better, however, than when he came into the dispensary. It is an interesting case.

A Case of Primary Epithelioma of the Urethra. J. E. PLATT, M.S., (LOND.), F.R.C.S., Honorary Surgeon to the Manchester Royal Infirmary, in *The Medical Chronicle*.

Epithelioma arising primarily in the urethra is of exceedingly rare occurrence, although it is not very uncommon to have extension of cancer to the urethra from the end of the penis, the prostate, the bladder, or the rectum.

The following case was under my care at the Manchester Royal Infirmary some little time ago.

R. M., aged fifty-nine, was admitted to the Infirmary on September 18th, 1905, complaining of old-standing urethral trouble. He stated that in the year 1860, when he was thirteen years of age, he injured his urethra by a fall upon the edge of a table, but it was not until two years later (1862) that he suffered from

"stricture." He had trouble with his water for a period of three or four years (1862—66), during which period catheters often had to be passed on account of retention. From that time for a period of thirty-five years (1866 to 1902) he had no trouble with his water. In 1902 he was again obliged to pass catheters at intervals of a few days. The difficulty in micturition became more marked, and about twelve months previous to his admission he was in the habit of leaving the catheters in the urethra in order to dilate the passage. For the preceding twelve months he had had to use the catheters almost daily. About nine months previously a medical man, under whose care he was, had incised a swelling on the under surface of the penis, about 1 1-2 inches from the meatus. The patient says that it was a "cyst," and that some blood and dark matter escaped when it was incised. This operation was followed by the formation of a fistula, which had never closed up. Six months previously (March, 1905) the patient had first noticed that his penis was becoming indurated. No history of venereal disease could be obtained.

When the patient first came under my care I found a urinary fistula on the under surface of the penis about 1 1-2 inches from the meatus. The penis generally was indurated. There was an offensive discharge from the fistula, and some urine dribbled from it on micturition. There was what appeared to be an almost continuous stricture commencing about one inch from the meatus and extending backwards as far as the bulb.

On September 30th, 1905, the patient was placed under chloroform, when, with some difficulty, I managed to pass a staff along the urethra into the bladder, and made a perineal section. A perineal tube was tied in the bladder. The operation was followed by a rigor, and for the first few days the temperature remained high. The tube was kept in the perineal opening for some days, and the urine discharged itself more or less completely through that opening until the patient left the Infirmary.

At that time I did not suspect that I had to deal with anything more than a bad stricture of the urethra, complicated by urinary fistulæ. The patient went home on October 25th, refusing to have any further treatment. He very soon returned, and begged to be re-admitted, and consequently he was again admitted under my care on November 27th, 1905. He stated that from the time he left the Infirmary the penile fistula had caused a constant offensive discharge, and that he had suffered very greatly from pain. When I examined him I found that a con-

siderable growth had taken place from the edges of the fistula, which were now greatly thickened and markedly everted. The penis generally had become very much more indurated. Micturition had to be performed very frequently, and gave rise to great suffering. The induration of the penis could be felt extending backwards through the base of the scrotum to the perineum. There was still a small fistula at the site of the perineal operation, and another small fistula opening just in front of the scrotum. The inguinal glands on each side were slightly enlarged.

At this time I came to the conclusion that the patient was undoubtedly suffering from epithelioma, and I therefore asked my colleague, Mr. J. W. Smith, to see the case with me. He agreed with my diagnosis and with the treatment which I had proposed, viz., complete removal of the penis with the crura and the bulb.

This operation was performed on December 6th, 1905. The patient having been placed in the lithotomy position, an incision was made around the base of the penis, and was then carried backwards along the middle line of the scrotum and the perineum to within half an inch of the perineal fistula. The two halves of the scrotum were separated, the attachments of the penis to the pubic arch were divided, the crura were freed from their attachments to the pubic and ischial rami, and the urethra was divided immediately behind the bulb. The cut end of the urethra was fixed by sutures in the perineal wound, and the bladder was drained by a perineal tube. The rest of the wound was closed by interrupted sutures.

On the day following the operation the temperature was 102.6 deg., but after that it remained normal. The wound was dressed daily and healed by first intention. The perineal tube was removed on December 13th.

The patient was inspected from time to time after his discharge from the Infirmary. When I last saw him, about three months after the operation, he was quite well, and, with the exception of a tendency to contraction of the urethral orifice in the perineum, he had no trouble at all. The contraction was overcome by dilatation.

Before the last operation I noticed a slight enlargement of the lymphatic glands in the groins. I was very doubtful whether this was due to any secondary infection, and I did not think it advisable to add to the shock of the operation I have already described by further operation upon the groins. I have exam-

ined these glands from time to time subsequently, and have found that they are quite unaltered.

The malignant disease in this case was rather advanced before the diagnosis was made, and I cannot hope that the man will have any very long period of freedom from recurrence. It is not improbable that before long we shall have a return of the malignant growth, either in the perineum or in the pelvic lymphatic glands, and this has influenced me in deciding not to undertake any further operation upon the inguinal glands, which after all are only very doubtfully affected by the cancerous growth.

By microscopic examination the growth was proved to be a typical squamous epithelioma.

The literature upon the subject of primary epithelioma of the urethra is by no means extensive. The first paper of importance is one which was published by the late Mr. Marcus Beck, in *Internat. Clinics*, 1892. Mr. Beck collected ten cases from medical literature. In this paper he refers to the difficulty of explaining its infrequency, both according to Cohnheim's theory and according to the persistent irritation theory of the origin of cancer.

After 1892 we find isolated cases in medical literature, including one published by Mr. W. P. Montgomery in the *Medical Chronicle*, for June, 1901. The most complete paper on the subject is one by Mr. J. Basil Hall, of Bradford, in the *Annals of Surgery*, Vol. 38, 1904. Mr. Basil Hall collected twenty-one cases in which the diagnosis had been confirmed by microscopic examination. He also collected five other cases in which no microscopic examination had been made, and in which, therefore, there must be doubt about the diagnosis. Since Mr. Hall's paper I have only been able to find references to two isolated cases, and I regret that in both cases I have not been able to consult the original paper.

The chief points which are brought out by an examination of the cases now on record are as follows:

Cause.—In a considerable proportion of the cases the patient has been the subject of old-standing stricture of the urethra. In my own patient there would appear to have been some injury to the urethra during boyhood, but I am unable to state definitely that there was a stricture dating from that time. Later, however, the patient undoubtedly had stricture, and it is probable that the malignant disease in his case was a result of the irritation produced in that way. In a few of the recorded cases there was no history of any urethral trouble prior to the origin of the malignant disease.

Symptoms.—Beck states that the chief symptoms to which malignant disease of the urethra gives rise are pain, hemorrhage, induration, and at a later stage induration of the lymphatic glands and cachexia. Hall, as a result of an analysis of the larger number of cases collected by him, states that Beck's account of the symptoms requires considerable modification. He states that in four of the cases which he collected there was a marked absence of pain and hemorrhage, and that in two cases instruments could be introduced into the bladder with great ease.

Diagnosis.—The diagnosis in these cases appears to be especially difficult, and in a large number of the recorded cases has not been made until any radical operation was out of the question. Stricture of the urethra, especially if associated with urinary fistulæ, is often accompanied with much induration, and in many cases the induration resulting from the growth has been for a time mistaken for inflammatory conditions resulting from stricture. The difficulties of diagnosis are especially marked in the early stages of the disease. It is possible that in certain cases early diagnosis may be facilitated by the use of the urethroscope.

Prognosis.—The prognosis in these cases must be regarded as most unfavorable. Much depends, however, upon the stage at which the diagnosis is made, and it is quite possible that if complete removal were effected early in the disease there would be a long period of freedom from recurrence, and perhaps absence of any recurrence in the future.

Treatment.—The only effective treatment lies in complete removal of the penis, with the bulb and crura. In cases where a radical operation is out of the question it is possible that relief may be afforded by means of perineal section.

Results.—It is worth while to give the results in the twenty-one cases which were collected by Mr. Basil Hall. In one case no treatment could be adopted, and in ten cases the treatment was merely palliative—simple incision or perineal section. All these patients died within nine months, except one who lived for eighteen months. In ten cases a radical operation was attempted, the results being as follows: In one the result was unrecorded; In four death took place within nine months; In one there was recurrence within six months. In the four remaining cases the patient was free from recurrence at the time of report, this period being twenty-one months, eleven months, ten months and four months respectively from the time of operation.

Therapeutics.

Some of the Many Uses and the Method of Administering Normal Salt Solution.

While this is not a new subject, normal salt solution having been in use for many years, its value has become widely recognized and it is being more and more used every day. Its value should not be underestimated in either surgery or medicine. How could the surgeon do without it? It is practically out of the question, for many hundreds of lives are saved every year that unquestionably would be lost if it were not for the use of salt solution.

The administration of normal salt solution supplies fluid to the body exhausted from loss of fluid through excessive purging, as in cholera, or in case of hemorrhage. It may be used to wash from the body various impurities circulating in the blood and lymph channels and to flush out the kidneys. In other instances it may be used to supply the body with fluid when liquids cannot be swallowed or retained.

As is well known, a quantity of liquid equal to four times the normal amount of blood may be passed directly into the veins without producing a rise of blood pressure, and experiments have shown that usually within fifteen minutes after the fluid flows into the subcutaneous tissue an increased flow from the kidneys takes place.

It is not safe to infuse into the intercellular spaces a greater quantity of liquid than one drachm to each pound of body weight in each fifteen minutes, for if this amount is exceeded the tissues become thoroughly saturated, drowned, so to speak, kidneys and skin being unable to excrete the liquid fast enough. (Hare.)

There is no excuse for not using it, since boiled water can be had almost anywhere. One teaspoonful of common table salt added to a pint of water will make about the right proportion, at least near enough for all practical purposes. Of course, where there is plenty of time, it should be made up with distilled water and should be six-tenths of one per cent. in strength. If it is not possible to get distilled water, filtered boiled water will answer every purpose, and this is most generally used. One should not hesitate, if the sodium chloride cannot be had, to use plain boiled water in case of extreme emergency.

The temperature should be from 112 to 115 deg. Fahrenheit. If in a hurry, the temperature can be estimated by pouring some of the solution over the hand. It should feel comfortably hot.

for some allowance must be made for the loss of heat in passing through the apparatus.

While many contrivances can be used for infusion or transfusion, the most satisfactory is Kelley's infusion apparatus, which is well known, simple and easily sterilized by boiling.

The best method of administering saline solution is by the rectum, and an untrained person can administer the solution in this way: The ordinary rectal tube and the irrigating can are generally used, but a male catheter, enema point or piece of gum tubing inserted well up into the rectum will answer every purpose. The fluid should be allowed to flow in slowly. A pint to a pint and a half, or even two pints, may be considered the proper amount of the solution. It is well to turn the patient on the left side and elevate the hips, causing the fluid to run up into the sigmoid. On the operating table the Trendelenburg position is most favorable, allowing the fluid to run well up in the colon. If the patient is restless and cannot retain an enema, or when an enema cannot be given, the infusion should be resorted to.

It is better to infuse than to transfuse, for the reason that when we infuse, or give solutions by rectum, the fluid is taken up by the lymphatics and has to pass through the lymphatic channels, becoming truly a part of the body fluids, while in transfusion the fluid is thrown directly into the blood and undergoes no physiologic change. Transfusion should be done in preference to infusion only when the pulse is very weak and we want immediate results. Then a vein should be opened and the saline solution allowed to flow in slowly. It is usual to open the median basilic, but on several occasions I have opened the brachial vein, which is larger, and, on that account, more convenient.

I have twice seen ill effects following an infusion. In one a nurse infused a strong salt solution under a child's breast, which resulted in a large slough. In the second instance a small vessel was punctured and a large clot of blood formed in the right sub-clavicular space, requiring evacuation by an incision.

Bisch warns against subcutaneous use of saline solution from experiences with it in Doderlein's clinic. He says it is quite harmless when injected into a vein or into the peritoneal cavity, but under the skin he thinks it is liable to produce gangrene. This, he claims, occurred in six cases under Doderlein. In one of these cases a fatal termination resulted from secondary infection. I cannot understand this if the right percentage and right temperature of the solution were used, and, most of all, if the solutions were sterile.

Following is the history of a case of typhoid fever in which I found saline solution very useful:

The young man, aged about twenty, had a very severe attack of typhoid. I saw him on the fourth day of his disease. His temperature at that time was 104 deg., pulse 102. He was in a semi-conscious condition and a very unpromising case. During the first nineteen days his temperature remained most of the time above 104 deg., going frequently above 105 deg., and on one occasion reaching 106 deg. His temperature after this gradually subsided and reached normal on the twenty-seventh day, but then rose and did not reach normal again until the fifty-fourth day. Tubbing had little or no effect upon the temperature. Ice-water enemas, one pint every two hours, seemed to have little or no effect. His toxic condition was very grave. This patient got 700 cubic centimeters of normal salt solution subcutaneously twice a day. He got thirty infusions in all—two every day for two weeks, and on two of the days when he was most ill an extra one, making thirty infusions in fourteen days.

These infusions were given under the pectoral muscles, except four, which were given in the flanks. There was no bad local effect, except a little stiffness and soreness, which lasted for a few days after the infusions were stopped. Before I began the infusions his mouth and tongue were parched and dry. Shortly after the infusions began these conditions were greatly improved. He secreted large quantities of urine and had to be catheterized frequently. I feel confident that the salt solution saved this man's life. I have seen similar good results from the salt solution in cases of pneumonia.

While I will not attempt to enumerate the conditions which loudly call for the normal salt solution, the most important ones are excessive hemorrhages, toxemia arising from various forms of infection, as in septicemia, uremia, the comatose state of diabetes mellitus, in cholera and in threatened eclampsia. It is also very useful in severe burns to overcome shock and toxemia.

The best place to give an infusion is under the mammary gland in women, lifting the gland well up and inserting the needle beneath the lower outer quadrant, pointing upward, and allowing the solution to flow in slowly through a needle about two millimeters in diameter. The needle should be inserted while the solution is flowing so no air can be introduced.

The loose cellular tissue and the breast quickly begin to distend; even a flatly atrophied organ will reach the size of a puerperal breast. The amount that can be easily put under a breast is about 700 cubic centimeters. It is more satisfactory in the

male, and in emaciated individuals, to lift the pectoral muscles, directing the needle upward and inward so that the fluid will infiltrate the subclavicular and axillary spaces.

The proper temperature of the fluid can be maintained by letting the tube carrying the saline solution lie immersed in a pan of hot water, about 115 deg. Fahrenheit. The saline enemas, which are often preferable, are best given in the way adopted by Murphy and the Mayos, that is, by inserting a small rectal tube and allowing a small stream of hot saline solution to flow into the rectum continuously. A large amount of the solution is thus taken up in the course of a day. The flow can be regulated by the elevation of the vessel above the individual, or, better, by a clamp on the tubing, limiting the flow to a very small stream, not more than a pint an hour. In surgical cases under anesthesia, it is well to give a pint by rectum before the patient awakens, for if given while awakening from the anesthetic the patient will nearly always expel it.

I have spoken of transfusion, and only recommend that it be used in very exceptional cases. It is a well-known clinical fact that some cases of shock are not much benefited by intravenous infusions of saline solution.

A series of sixty experiments on dogs was undertaken by George W. Crile, which he reported in the *Medical Record*, April 19, 1902, to determine the effect of the solution at varying temperatures, the cause of death from excessive infusions, dilution of blood, effect on respiration and other topics. The conclusions he arrived at were that if the blood pressure had been lowered by moderate hemorrhage alone infusion promptly restored it. If it had been lowered by exhaustion of the vasomotor system by afferent impulses from an injury of the cerebro-spinal or sympathetic nervous system, infusion restored the pressure in inverse proportion to the vasomotor exhaustion, that is to say, it is effectual in shock in inverse proportion to the impairment of the vasomotor mechanism. If the matter be greatly impaired or abolished, infusion has no certain effect, although if the impairment is considerable, but not of extreme degree, it will probably restore the pressure.

Blood pressure is re-established but little, if any, above the normal, because of the rapid escape of fluid from the tissue and of the automatic centre in the medulla, which, when the pressure rises above normal, slows the heart and lessens vaso-constriction in the area of peripheral resistance. If the peripheral resistance is lost (fatal shock) no amount of fluid can do more than temporarily and partially restore the blood pressure, and death is

inevitable. If the shock is much increased by regional accumulation of blood, as in operation affecting the splanchnic area, infusion may be effective, because the vasomotor mechanism has not gone into resolution.

Murphy says the above deduction explains why some cases of shock are but little, if at all, benefited by infusions. In almost every case an artificial pulse may be procured, even of considerable volume, but without resistance. It will disappear almost as quickly as it came and no amount of infusion will sustain the circulation, for the vasomotor mechanism has gone into resolution, abolishing the peripheral resistance.—*A. Aldridge Matthews, M.D., in Maryl and Med. Jour.*

Physician's Library.

A Text-Book of Obstetrics. By BARTON COOKE HIRST, M.D., Professor of Obstetrics in the University of Pennsylvania. Fifth revised edition. Octavo of 915 pages, with 753 illustrations, 39 of them in colors. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, \$5.00 net; half morocco, \$6.00 net. Canadian agents, J. A. Carveth & Co., Toronto, Ont.

One would almost consider it enough to say this is the fifth edition of Hirst's Text-Book of Obstetrics, as that certainly establishes its popularity. The author himself has carefully revised this edition, and particular attention has been paid to new information on puerperal infection and gestational toxæmia. There are 767 illustrations, 40 being in colors.

Diet in Health and Disease. By JULIUS FRIEDENWALD, M.D., Clinical Professor of Diseases of the Stomach in the College of Physicians and Surgeons, Baltimore; and JOHN RUHRAH, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Second revised edition. Octavo of 728 pages. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, \$4.00 net; half morocco, \$5.00 net. Canadian agents, J. A. Carveth & Co., Toronto, Ont.

This is the second edition of this book. It is dedicated to Dr. William Osler. The chief change and improvement over the first edition is the fact that the section on the Salts has been re-written and enlarged, with particular attention to the work of

Professor Chittenden. There are many useful recipes and diet lists, and the book will now be found to fully meet the requirements which first brought it forth, namely, the needs of the general practitioner, hospital interne, medical student, and nurse at the training-school.

Saunders' Pocket Medical Formulary. By WILLIAM M. POWELL, M.D., Author of "Essentials of Diseases of Children"; Member of Philadelphia Pathologic Society. Containing 1,831 formulas from the best-known authorities. With an appendix containing Posologic Tables, Formulas and Doses for Hypodermic Medication, Poisons and their Antidotes, Diameters of the Female Pelvis and Fetal Head, Obstetric Table, Diet Lists, Materials and Drugs used in Antiseptic Surgery, Treatment of Asphyxia from Drowning, Surgical Remembrancer, Tables of Incompatibles, Eruptive Fevers, etc., etc. Eighth edition, adapted to the new (1905) Pharmacopeia. Philadelphia and London: W. B. Saunders Company, 1906. In flexible morocco, with side index, wallet and flap, \$1.75 net. Canadian agents, J. A. Carveth & Co., Toronto Ont.

Those who have been in the habit of keeping this formulary by them will find many obsolete formulæ omitted from this, the eighth edition; but they will find benefit from over 400 new and up-to-date ones. The beginner will find here good helps, the student good studies.

A Treatise on Surgery. In two volumes. By GEORGE R. FOWLER, M.D., Examiner in Surgery, Board of Medical Examiners of the Regents of the University of the State of New York; Emeritus Professor of Surgery in the New York Polyclinic, etc. Two imperial octavos of 725 pages each, with 888 text illustrations and 4 colored plates, all original. Philadelphia and London: W. B. Saunders Company, 1906. Per set: cloth, \$15.00 net; half morocco, \$17.00 net. Canadian agents, J. A. Carveth & Co., Toronto, Ont.

On a former occasion we drew attention to the first volume of this work, and we desire to record our appreciation of the second volume, just received. In this volume the same care and thoroughness are manifested in the discussion and illustration of the various subjects, as in the former volume. Special mention should be made of the excellent and numerous illustrations, and remarkably clear text. This volume deals with the surgery of the dorsal and lumbar vertebrae, of the abdominal and pelvic

region (with excellent chapters devoted to the surgery of the female pelvic organs), and Sections XX. and XXI. devoted to the surgery of the upper and lower extremities respectively.

The profession will undoubtedly reap a large measure of benefit from the work Professor Fowler has left as a legacy to us all.

Prevalent Diseases of the Eye. By SAMUEL THEOBALD, M.D., Clinical Professor of Ophthalmology and Otology, Johns Hopkins University. Octavo of 551 pages, with 219 text illustrations and 10 colored plates. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, \$4.50 net; half morocco, \$5.50 net. Canadian agents, J. A. Carveth & Co., Toronto, Ont.

This book is essentially one written for the general practitioner; and on that account it deals with those affections of the eye he can readily treat, and, if not, can readily qualify himself to treat. It has been the aim of the author to set forth definite information in a clear form and not to burden the reader with unnecessary detail. On treatment the author is unambiguous and as specific as he is practical.

Abdominal Operations. By B. G. A. MOYNIHAN, M.S., (London), F.R.C.S., Senior Assistant Surgeon at Leeds General Infirmary, England. Second revised edition, greatly enlarged. Octavo of 815 pages, with 305 original illustrations. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, \$7.00 net; half morocco, \$8.00 net. Canadian agents, J. A. Carveth & Co., Toronto, Ont.

The fact that only a few months have passed since the first edition of this work appeared, and that it has been found necessary to bring out a second edition, must be a source of satisfaction to both the author and the publishers. Mr. Moynihan has found it necessary to make a large number of additions to both text and illustrations, while two of the chapters have been entirely re-written.

The work is divided into five sections, dealing with the following subjects: 1. General Considerations. 2. Operations upon the Stomach. 3. Operations upon the Intestines. 4. Operations upon the Liver. 5. Operations upon the Spleen and Pancreas.

Space will not permit us to enter upon a minute or even a casual review of each of the forty-nine chapters which form the subdivisions of the work. Suffice it to say the work is most

exhaustive in its discussion of the various subjects, and, of course, most thoroughly up-to-date. The author expresses his indebtedness to such well-known authorities as Dr. W. J. Mayo, Dr. J. B. Murphy, and Mr. Mayo Robson, for help derived from their work. He has confined his discussions only to those operations which are common to the two sexes. No gynecological operations are described. The surgery of organs such as the kidney and the bladder, which are partly intraperitoneal and partly extraperitoneal, is not included, neither are the various operations for hernia described.

While the work is more especially of interest to abdominal surgeons, it should be of great value to the general practitioner, enabling him to gain a world of information on subjects with which he should be familiar, even though he be not actively engaged in doing the various operations. In view of this fact, and because we feel it to be such a thoroughly satisfactory work, we have great pleasure in unhesitatingly recommending it to our readers.

Surgery, Its Principles and Practice. By various authors. Edited by WILLIAM WILLIAMS KEEN, M.D., LL.D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia. Vol. I. With 261 text illustrations and 17 colored plates. Philadelphia and London: W. B. Saunders Company. Canadian agents, J. A. Carveth & Co., Toronto.

That which is before us is the first volume of a new system of surgery which is to be written by the great men of medicine in the medical world of to-day. It is to comprise 4,000 pages in five volumes; and the fact that it is edited by the distinguished American surgeon, Dr. Keen, bespeaks for it originality, ability and breadth of scope. In fact, nearly fourscore eminent scientists, medical solons, surgeons are engaged in the preparation of the text. At the present time this is the only volume off the press, and it is a typical example of the excellent matter issued by the well-known house of W. B. Saunders Company. The succeeding four volumes will follow and be issued just as fast as the editor and his staff of masters can produce them. In looking over the contributors to the work, whilst we are gratified to find the names of J. George Adami, George E. Armstrong and William Osler, we confess to some little disappointment that two or three others are not incorporated therein, as we believe in other sections of Canada (not particularly in Toronto) outside Montreal, there could be found men who could at least from their

experience and knowledge have dealt with such subjects as the surgery of the thyroid, intussusception, and septic peritonitis in a bright and continuous light. No one is better qualified to deal with the subject of Inflammation than Professor Adami; indeed, he has already contributed to the medical press the best ever written on the subject. Dr. Armstrong is a surgeon of the first rank, one in whom Canadians, even outside of Montreal, take a great deal of pride. Professor Osler is the first of Canadian physicians, although domiciled in the homeland; indeed, he is the best-known physician in the world to-day. To the book itself, the first volume, however, let us turn. The first chapter of 78 pages is an exceedingly interesting historical sketch, embellished with portraits of Lord Lister, Billroth, Bernard Langenbeck, Sir Astley Cooper, Samuel D. Gross, Warren, McDowell, Physick, John Hunter, Von Haller, Ambrose Paré and Vesalius. Following this are twenty-one chapters dealing with the following subjects: Surgical Physiology; Examination of the Blood; Infection and Immunity; Inflammation; Suppuration, Abscess and Fistula; Ulceration and Ulcers; Mortification or Gangrene; Process of Repair; Thrombosis and Embolism; Erysipelas; Tetanus; Diseases caused by Special Infections; Diseases derived directly from Animals, Insects and Reptiles; the Traumatic Fevers; Scurvy; Rickets; Surgical Tuberculosis; Chancroid; Syphilis; Tumors and Wounds and Contusions. The illustrations are nice, fresh and new; the text all that could be desired; the general make-up first-class.

Atlas and Text-Book of Human Anatomy. Vol. I. By Professor J. PLAYFAIR McMURRICH, A.M., Ph.D., Professor of Anatomy at the University of Michigan, Ann Arbor. Quarto volume of 258 pages, containing 320 illustrations, mostly all in colors. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, \$6.00 net; half morocco, \$7.00 net. Canadian agents, J. A. Carveth & Co, Toronto, Ont.

If the splendid start made be kept up in the second volume, then students of anatomy will have a new and decidedly interesting work. This anatomy is distinguished by three things: 1, the beautiful illustrations; 2, the concise and pointed text; 3, the anatomical nomenclature. The latter, we are told, is essentially that of the Basle committee, and is such that it will at once appeal to students. The work will as well prove one of decided advantage to practitioners. In that it is so finely illustrated, and the text so pointed, it is essentially a very practical anatomy.

A Text-Book on the Practice of Gynecology. For Practitioners and Students. By W. EASTERLY ASHTON, M.D., LL.D., Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Third edition. Thoroughly revised. Octavo of 1,096 pages, with 1,057 original line drawings. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, \$6.50 net; half morocco, \$7.50 net. Canadian agents, J. A. Carveth & Co., Toronto, Ont.

This well-known work makes its revised appearance in the third edition before us. The author has evolved a work of which he may justly be proud, and with which the profession may well be satisfied. Prof. Ashton has given us, what many of us prize not a little, a treatise which is not so much a compilation of what other men have thought and done, but rather his own thought and experience. The alterations have been somewhat extensive, and much new and valuable material has been added. The work is exceedingly comprehensive—as a work with such a title should be—and will, we feel sure, be a welcome addition to the physician's library.

The American Illustrated Medical Dictionary. New (4th) edition. All the terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry and kindred branches; with over 100 new tables and 2,000 new words. By W. A. NEWMAN DORLAND, M.D. Octavo of 836 pages, with 293 illustrations, 119 of them in colors. Philadelphia and London: W. B. Saunders Company, 1906. Flexible morocco, \$4.50 net; thumb indexed, \$5.00 net. Canadian agents, J. A. Carveth & Co., Toronto, Ont.

This splendid work has become so well known to students and practitioners through its former editions that it would almost seem unnecessary to draw attention to this last (4th) edition—1906. Personally, however, we cannot refrain from expressing our thorough satisfaction with the work, in this its last and most complete form. For years it has been our rule to recommend this work to our clinical classes; indeed, we do not know of any one book which is so all-important to the student (and that term does not necessarily mean simply the undergraduate) as a good dictionary, and of such we know of no better all-round work than this one. In addition to the host of new words that have been added—over 2,000—one might mention such improvements as: considerable amplification of each table, and the addition of six new colored plates illustrating the subjects of Appendicitis, Diph-

theria, Gall-stones, Leishman-Donovan bodies (found in the spleen and liver of patients suffering with a peculiar tropical fever and cachexia, and thought to be a new species of parasite), Measles and Nephritis. In short it may be summed up as a most exhaustive work, put up in a most attractive and convenient form, and worthy of a place *on the desk* of every student and practitioner.

In the presence of a breast infection that fails to heal within a reasonable time after appropriate incision and dressings, it is well to think of local tuberculosis.

It is wrong to perform any radical operation for an ulcer of the tongue without preliminary microscopical examination. Clinical symptoms, no matter how typical, are often misleading.

The perinephric space is a frequent site of metastatic inflammation after furunculosis or other septic infection.

In exploring for tumors of the brain, the best guide for determining an isolated hardness is the finger; the use of a needle is very deceptive.

When palpating the common bile duct for stone, make sure that a suspected calculus is not a gland.

In the progress of a cholecystectomy, if a stone slips away after cutting through the cystic duct and cannot be found, no great anxiety need be felt, for the stone usually comes away spontaneously in the subsequent discharge.

As a final cleansing step after curettage of the uterus it is well to introduce, and at once withdraw, a packing of gauze. This brings out with it fragments of tissue not washed out by the irrigation.

In cases of fracture where an end of the bone lies close beneath the skin do not place a pad or any pressure whatever over this point.

In cases of pain in the hip of doubtful origin, examination of the kidney region may discover the cause.—*American Journal of Surgery*.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

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Dominion Medical Monthly

And Ontario Medical Journal

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Published on the 15th of each month. Address all Communications and make all Cheques, Post Office Orders and Postal Notes payable to the Publisher, GEORGE ELLIOTT, 203 Beverley St., Toronto, Canada.

VOL. XXVII.

TORONTO, DECEMBER, 1906.

No. 6.

COMMENT FROM MONTH TO MONTH.

The Toronto Board of Education will soon have to take up the question of the medical inspection of schools; other Canadian cities will follow, if they do not precede. Montreal is experimenting; the results there will be watched with keen interest.

Never before, it might be safely ventured, has the child, and all which pertains thereto, been so prominently in the public eye of the United States and Canada; even in Great Britain and on the Continent. The illuminative writings of Mr. Edwin Markham on "The Hoe-Man in the Making," child labor, the new thing in human affairs, have attracted widespread attention, more particularly in the American Union, where, in a certain section of that mighty republic, "Christian civilization" (?) tacitly looks on seventeen hundred thousand children at work, all day long, and often far into the dark and silent watches of the night.

Whilst the American nation is becoming keenly alive to the evils of the child at work, in certain cities thereof it has been alive to the evils surrounding the child at school, for several years. In New York City, for instance, since March of 1897, some sort of medical inspection of schools has been in vogue. That system which is now in use was adopted in 1901.

It may be asked: Why should schools be inspected by medical men regularly? The most potent reason which will appeal to parents will be the early diagnosis of infectious and contagious diseases, and the consequent prevention of cases of these amongst other members of the school. As is well known, many of these, particularly measles, mumps, whooping cough, chicken pox, are often never treated by a physician, with the almost sure result that there is a widespread field of infection, and subsequent development of dangerous cases. Even scarlet fever has been treated at home from so-called "doctor's books," "home physicians," etc. Consequently unwise parents allow their children to appear at school before all chances of infection are eliminated. It is a well-established fact that those neuroses of childhood such as St. Vitus' dance, hysteria, enuresis, etc., are contracted from school life, often the result of over-work and nervous strain. Add to these the prevalence of undetected pediculi, growths in the nose and naso-pharynx, defective eyesight, crooked spines, and we have a whole host of reasons for the adoption of the system of medical inspection.

Let us now give some opinions from eminent pediatricists: Dr. L. Emmett Holt, New York, who is looked upon as probably the best specialist in this branch of medicine, says that the medical profession have been rather forgetful of this matter, and they should be the first to teach the mother how to bring up her offspring with the best physical results; that the care of the child was in a great deal a nutritional one; that children as infants required careful feeding. The medical man should teach the mother as to feeding, school hours and play hours. All children should be taken to their physicians at least twice a year for thorough physical examination. Dr. A. Jacobi says that no child should be sent to school under six years of age; seven years of age was the proper time. They should be well trained physically first. It was contrary to physiology and anatomy that a child should be at school before seven years of age. Dr. Wm. P.

Northrup considers that medical inspection is essential, as it finds out what eyes, noses, throats, and teeth need correction. Dr. Henry Dwight Chapin thinks that higher education is largely at fault, as it places a strain upon growing children. Add to this bad housing and bad food, and the results were all against the school child.

A systematic inspection of school children would largely tend to correct these evils. Dr. R. J. Freeman, New York, in the *Archives of Pediatrics*, gives these essentials in the preservation of health of children: 1. A proper diet, all meals to be eaten slowly and well masticated. 2. Ample rest; ten to twelve hours in bed at night, and often with advantage a nap after the mid-day meal. 3. Fresh air. 4. Freedom from dust and exposure to disease. 5. Freedom from worry and fatigue.

New York in 1897 started this work with 150 medical inspectors at \$30 per month, and their duty was to make a morning visit to the school to examine all children suspected of being sick with some contagious or infectious disease. In the fall of 1901 fewer inspectors were employed, and their pay increased to \$100 per month. Each man had four or five schools under his charge, with an aggregate attendance of 5,000 pupils. Morning inspection was made from nine until twelve. Morning inspection concerned: 1. Those isolated on account of suspected contagious diseases; 2. Those who had been absent for several days; 3. Those excluded from school. When this was performed each day, the inspector returned to some school and made a routine examination of each pupil.

Montreal set apart \$3,000 for experimenting with this work; and for the last three months of this year forty medical inspectors have been working at \$25 per month. That it is a question of preventive medicine urgently needed is seen from the following: Out of 43,241 children examined, 20,622 were found suffering from some affection more or less necessitating medical treatment. One thousand six hundred and ninety-nine had inflammation of glands; 1,023 had defect of vision; 9,393 had decayed teeth; 2,107 had enlarged tonsils; 1,091 had pediculi. Of infectious and contagious diseases, five had diphtheria; two scarlet fever; seven measles; seven whooping-cough; eight mumps; one chicken-pox, and twelve erysipelas. There were a host of minor complaints and diseases.

From time to time some subscriber sends us in a circular or "dodger" bearing the names of medical men who are recommending and using a certain remedy. Just recently we have received one of these "dodgers," bearing on the subject of piles and the cure thereof. Strange it is that pile-curing is such an attractive field to the ordinary, every-day quack, but stranger still is it that medical practitioners will subscribe to such a thing as a "positive cure." On this dodger referred to are the names of medical men who live and practise not a thousand miles from a city in Western Ontario which supports two large breweries. This may account for the prevalence of piles in their midst; and then, of course, any such thing as a "positive cure" would be a positive gain financially. We would respectfully suggest to these gentlemen that, in order to spread broadcast this "positive cure" throughout the length and breadth of their beautiful city, that signs bearing these words be hung in their office windows:

PILES CURED WHILE YOU WAIT.

Business would certainly boom when it was known the application was painless and easy, and that the relief was immediate.

The manner of conducting the elections of the Ontario Medical Council is said by many to be unsatisfactory, and needs to be remodelled. A system should be devised whereby neither returning officer nor anyone else would know the candidate any elector votes for. This will be something for the new Council to consider.

The Sixth International Dermatological Congress will meet in New York City from the 9th to the 14th of September, 1907. Dr. James C. White, Boston, is the president, and Dr. John A. Fordyce, New York, the General Secretary. Drs. Gordon Campbell, Montreal, and Graham Chambers, Toronto, are the secretaries for Canada.

News Items.

"McGILL UNION" has been organized at McGill University, Montreal.

THE Anti-Expectoration By-law of Montreal is being enforced.

REGINA, Sask., will endeavor to erect a \$100,000 municipal hospital.

DR. PEARSON, M.H.O., Brantford, suggests a municipal sanatorium for that city.

THE Muskoka Cottage Sanatorium treated 236 patients during its last official year.

THE Home for Incurables, Toronto, cared for 171 patients during its last hospital year.

JOLIETTE, Quebec, has inaugurated a movement to establish a sanatorium for tuberculosis.

DR. BLACKWELL, London, has been appointed house surgeon at the Sarnia Hospital.

THE Muskoka Free Hospital for Consumptives admitted 186 patients during its last hospital year.

DR. H. R. BRIGHT, of Drayton, has been appointed associate coroner for the county of Wellington.

DR. J. W. DANIEL, St. John, N.B., recently read a paper before the St. John Medical Society on that city's milk supply and its control.

DR. JOHN CHISHOLM, son of Dr. Chisholm, M.P., of Wingham, has located at Prince Albert, Sask.

DR. J. P. PENNYFATHER, Holland, Man., will establish a Sanatorium for consumptives at Spruce Hills, Man.

DR. EDMUND E. KING has been unanimously elected to represent Toronto East in the Ontario Medical Council.

DR. J. S. HART, Toronto, has been elected to the Ontario Medical Council to represent West Toronto District.

DR. E. JESSOP's many friends will be pleased to learn of his success at Roland, Man., since opening an office there.

THE National Sanitarium Association has commenced the publication of a magazine called *Canadian Outdoor Life*.

DRS. C. J. FAGAN and J. E. DAVIE, Victoria, recently addressed the Board of Trade of Victoria on tuberculosis.

THE Medical Council of British Columbia at its recent session in Victoria refused to reinstate Dr. R. E. Telford, Vancouver.

AT the recent British Columbia medical examinations at Victoria there were twenty-four more candidates than in any previous year.

DR. McLAUGHLIN, of Dashwood, intends leaving in a short time for Europe, where he will take up some special study of his profession.

ADVANCED consumptives to the number of 149 were admitted to the Toronto Free Hospital for Consumptives during the past hospital year.

It took \$15,267.00 to run the Montreal Maternity last official year. The births numbered 403. The city will be asked to aid the institution.

DR. WILLIAM WARWICK has been appointed assistant pathologist and bacteriologist to the St. John, N.B., hospital, assisting Dr. G. A. B. Addy.

DR. WALTER B. KENDALL, Toronto, has successfully passed the Edinburgh examinations, and will do further post-graduate work in London and Dublin.

IN the outdoor departments of the Montreal General Hospital 932 patients were treated to a conclusion during the last quarter. There were 11,927 consultations in the outdoor departments.

DR. THOMAS R. HENRY, who has practiced for the past three years with his father, Dr. S. M. Henry, of Harriston, Ont., has located at Burgessville, Ont., having bought out Dr. Service of that village.

AT the initial meeting of the Chatham Medical Association, held in Harrison Hall, officers were elected for 1906 as follows: President, Dr. R. V. Bray; Vice-President, Dr. Musson; Recording-Secretary, Dr. Sullivan.

DR. F. E. WATTS, a young Toronto physician, has been appointed assistant to Dr. Bell on the Provincial Board of Health. He will spend the winter among the railway and lumber camps of Northern Ontario.

THE Royal Sanitary Institute of Great Britain, through its Dominion Board of Examiners, will hold examinations in the Provincial Board of Health's offices, Parliament Building, Toronto, on the 18th of December.

WE congratulate Dr. J. H. Cormack, St. Thomas, upon his splendid run for the Ontario Medical Council. Dr. Cormack is one of the leading young practitioners of Western Ontario, and will make a desirable acquisition to the Council.

REV. R. G. SCOTT, Dauphin, Man., who has been doing missionary work amongst Galicians in that province, has entered the Manitoba Medical College to qualify for the degree of M.D., so as to more successfully carry on his missionary work.

You are invited to join the Surgeon's Club, of Rochester, Minn. The object of the club is to provide a common place for meeting fellow visitors and for study and discussion of matters of surgical interest. The president and recorder are elected each Monday. The permanent secretary and treasurer is elected annually. Reporters are appointed each day to take notes at the hospital the following morning. Daily meetings are held at the club rooms at 4 p.m. The fee is \$1.00, good for one visit or for one month. Permanent membership \$5.00, limited to 100 members.

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